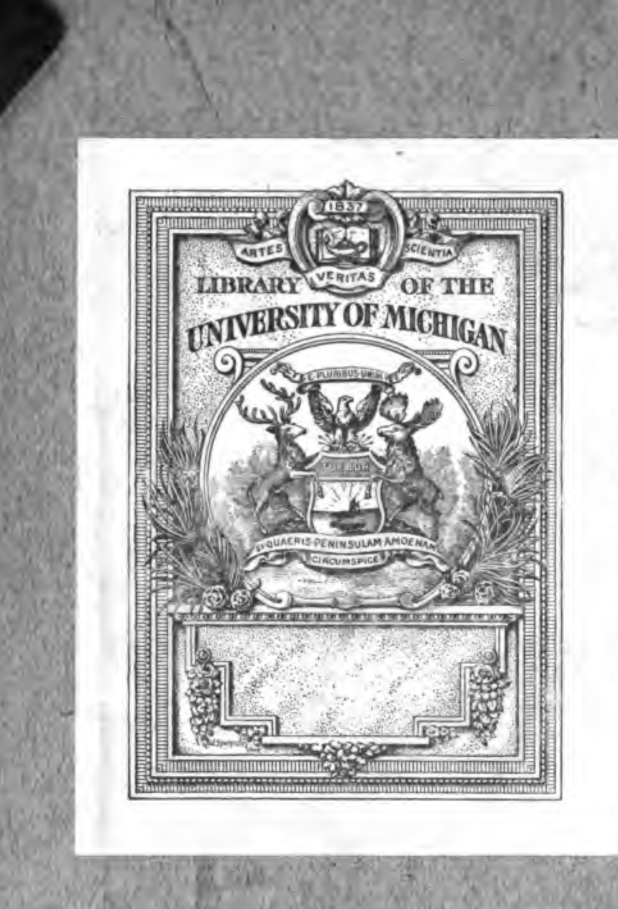

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T. LUCRETI CARI

DE RERUM NATURA

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With an Introduction

AND

NOTES TO BOOKS I., III., AND V.

BY

FRANCIS W. KELSEY

UNIVERSITY OF MICHIGAN

FIFTH EDITION.

ALLYN AND BACON

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PREFACE.

In the present volume an attempt has been made to explain some portions of Lucretius' *De Rerum Natura*. The poem is printed in full for the reason that, being a work of art, it ought to be presented as a whole. The first, third, and fifth books were chosen for comment because they contain the gist of the poet's doctrine and a greater number of fine passages than the others. It is hoped that the reading of the remaining books will be facilitated by the analysis of the subject-matter given at the end of the introduction.

The text is that of Munro's third edition, from which it was reprinted with his authorization. To justify the adoption of this text in a book intended primarily for the use of students, seems hardly necessary; for Munro's Lucretius marked a new era in the critical study as well as the interpretation of the poet. The more important emendations and variations of reading in the first, third, and fifth books are given in the notes. It has not been thought advisable to indicate in the

text or notice in the commentary the numerous transpositions of lines suggested by Munro, because they are a source of confusion to any but the critical scholar. Most students, and general readers as well, prefer a text in either prose or poetry free from all marks not needful for convenient reference.

The introduction was prepared with the design of offering some suggestions regarding the personality of Lucretius, his mission in philosophy, and his rank as a poet. In the notes it has been the editor's aim not simply to explain the more difficult word-forms and constructions, but also to bring out the philosophic import of the passages annotated in the light of both ancient and modern thought. Most classical writings have an interest for us mainly because of the general human element in them, — because they crystallize in artistic form something that appeals to thinking men of all times and of all nations. But Lucretius stands in close relation with the life of the present. His work is not lacking in the power and finish that mark the true poet, — one the duration of whose fame is to be measured not by decades, but by centuries. At the same time his verse is the vehicle of a philosophic system, which, recurring from time to time in the speculations of the past, has only in the present generation found its fullest development and exposition, and its widest application. The *De Rerum Natura* reveals its deepest significance only when studied in connection with the thought of to-day.

Frequent citations in the notes and introduction indicate the works which the editor has found occasion to refer to in the preparation of this book. Of the commentaries, that by Munro has been most drawn upon. The changes in this third edition are comparatively few, aside from the correction of some typographical errors.

FRANCIS W. KELSEY.

ANN ARBOR, MICHIGAN,
December 1, 1892.



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"LUCRETIUS, nobler than his mood:
Who dropped his plummet down the broad,
Deep universe, and said, 'No God,'

"Finding no bottom: he denied
Divinely the Divine, and died
Chief poet on the Tiber-side."

MRS. BROWNING, 'Vision of Poets.'

"Lucretius, living mournfully in the moral desert his doubts had scorched into barrenness." — FARRAR, 'History of Free Thought.'

"In Lucretius the Roman character found its most perfect literary incarnation." — J. A. SYMONDS, 'Fortnightly Review.'

"Lucretius had drunk deeper of the scientific spirit than any other poet of ancient or modern times except Goethe." — HUXLEY, quoted by JOHN FISKE in 'Cosmic Philosophy.'

"Lucretius stands alone as the great contemplative poet of antiquity. He has proclaimed with more power than any other the majesty of Nature's laws, and has interpreted with a truer and deeper insight the meaning of her manifold life." — SELLAR, 'Roman Poets of the Republic.'

"I admire him as the first of demoniacs; the frenzy of an earth-born or hell-born inspiration; divinity of storm-music sweeping around us in eddies in order to prove that for us there could be nothing divine." — DE QUINCEY, 'Essay on John Keats.'

INTRODUCTION

I. LUCRETIUS AS A MAN.

Of the life of Titus Lucretius Carus nothing is known with certainty. No allusion to it is found in his poem, while in the Latin writers there are only two passages bearing upon it. Jerome[1] assigns the year of his birth to B. C. 94; and says of him that he became insane by the administration of a love-potion, and that 'after he had composed, in the intervals of his madness, some books which Cicero afterwards corrected, he killed himself in his forty-fourth year.' Donatus, in his life of Vergil, remarks that on the day on which Vergil assumed the *toga virilis* (Oct. 15, B. C. 55) 'it happened that the poet Lucretius died.' Between the two statements there is discrepancy. Either Lucretius died before he reached his forty-fourth year, or the date of his birth must be put earlier than 94.

The *De Rerum Natura* was evidently given to the world in an unfinished state.[2] The completion of it, as in the case of the Aeneid, was probably prevented by the poet's death. Now from one of Cicero's letters to his brother,[3] written in the earlier part of 54, it is clear that they were both familiar with the poem. At that time it was likely already published, or being copied for circulation. This seems to confirm the statement of Donatus. In the absence of further evidence we may suppose that Lucretius died in the year 55.[4] If Jerome was correct in fixing his

[1] In his additions to the Eusebian Chronicle, under the year of Abraham 1923 (=B. C. 94).

[2] See Introd. p. xlviii.

[3] Ad. Q. Frat. 2, 11 (9), § 4.

[4] But Cf. Bockemüller,'Lucr.' i. p 4.

age at forty-four at the time of death, he was born late in B. C. 99 or in the earlier part of 98.

The name Lucretius was famous in Roman annals from an early date. The stock, or family, to which it belonged was primarily patrician, but in the poet's day had at least three plebeian branches, all of good standing, with the surnames Gallus, Ofella, and Vespillo. It is known from coins that there was a Lucretius Trio, who was probably of plebeian parentage. The patrician Lucretii had the surname Tricipitini, but gave to history no distinguished character after the third century B. C. The name Carus is not found elsewhere coupled with Lucretius.[1] But Titus, as Munro has noticed,[2] was a not infrequent prænomen among the Lucretii Tricipitini; this slight clue perhaps makes it probable that from them the poet sprung. That his rank was high is evident from the poem itself. He was thoroughly imbued with the culture of the time; and education was then a boon in the reach only of the upper classes. In his dedication he addresses the well-known and influential Memmius as friend and equal;[3] not with the tone of inferior to patron, as of Horace to Maecenas. Scenes of luxury are familiar to him; and he touches on them not with the air of a novice in high life, but of one who had always been in the midst of elegant surroundings.[4] Regarding the circumstances of his education and the moulding influences of his life, as we know absolutely nothing, it is idle to speculate.

The story of Lucretius' madness has been much enlarged upon, and has surrounded his name with a romantic halo.[5] Possibly it is a myth, framed and circulated by those envious of his ability and hostile to his doctrine. At any rate, no mention seems to have been made of it before the time of Suetonius, from whom doubtless Jerome drew his account.[6] Indeed the

[1] Munro has found "a very doubtful" 'Lucretius Carus' in Mommsen's Inscr. Reg. Neapol. Lat. 1653.

[2] 'Lucretius,' 4th ed. vol. ii. p. 2.

[3] See notes to 1, 26 and 141.

[4] Cf. e. g. 2, 24–36.

[5] Cf. Tennyson's 'Lucretius'; Lambinus 'De Vita Lucretii.'

[6] It seems well established that in his additions to the Eusebian Chronicle

poem reveals a grasp of thought, unity of plan, and power of consecutive reasoning, such as to preclude the belief that it was composed 'in lucid intervals.' Still, the last books are of unequal spirit and finish. Though abounding in magnificent passages, unexcelled in the first three books, they evince a lack of clearness in analysis that may be due to a waning power of co-ordination.[1] In a few places the lines seem to have been hastily composed, and jotted down to bridge over till something better could be written. It appears certain from the realistic power of several passages that the poet was tormented by horrid dreams and visions in sleep and sickness;[2] these may well have marked the incipient stages of some mental disorder. There is no indication that Lucretius attempted any other work. Into this one poem all the fervid energy of an earnest life was thrown. It may be that his powers, long wrought up to the highest tension, after a few premonitions suddenly gave way; that, plunged into despair at the loss of mental grasp and the inability to finish his work, following the example of one whom he looked upon as guide and master,[3] he put an end to a life no longer happy or useful. Perhaps, as Sellar suggests, he "may have himself attributed what was either a disorder of his own constitution, or the result of a prolonged overstrain of mind, to the effects of some powerful drug taken in ignorance." The cold satire with which he treats the passion of love may have given rise to the tradition that his reason was wrecked by a philter given him to stir the sluggish affections.[4] In a distorted way the story probably reflects some tragic fact of the poet's life.[5]

Jerome followed the lost 'De Viris Illustribus' of Suetonius.

[1] Cf. nn. to 5, 82–90; 5, 110; 5, 511; 5, 1092.

[2] See 1, 132–5; 4, 33–8; 4, 732–4; 4, 757–61; 5, 1169–78, etc. Cf. Sellar, 'Rom. Poets of the Rep.' ed. 2, p. 277.

[3] Democritus. See 3, 1039–41, and n.; n. to 3, 81. Cf. De Quincey, 'Essay on John Keats,' note 63.

[4] That madness was thought by the ancients sometimes to result from the taking of love-potions is shown by Munro, n. to 1, 132.

[5] Cf. Lachmann, 'Comm. in Lucr.' n. to 1, 927 *ad fin.*

But while Lucretius had no biographer and did not, like Horace and Ovid, tell his life out in his verse, his personality is by no means obscure. No poem, ancient or modern, shows more clearly than the *De Rerum Natura* the impress of a marked individuality. Some poets voice a general feeling, or paint a pleasing fancy, or describe an experience, in such a way one cannot tell whether they are giving an insight into their own hearts and lives or not. But not so Lucretius. In the course of his reasoning he speaks in the first person, often with direct address bids Memmius heed what he is saying.[1] His diction is characterized by a vehemence and straightforwardness of statement that can have their source only in sincerity and firm conviction. He never trifles. Whether he is reasoning about the atom, or explaining natural phenomena, or hurling fierce invectives against the blind thraldom of men under superstition, he is always terribly in earnest. Between the lines of the poem we read the man.

In Lucretius the fire and graphic power of the poet were aptly blended with the calm logic and constructive ability of the philosopher. With the poet's eye he looked out upon the world, and scanned the life of men; with philosophic sweep of thought he marshalled in array all the facts that he had gained, and tried to track out causes, to know the origin and modes of being, to fathom the mystery of the universe.[2] Few of the ancients lived in so close sympathy with nature as he;[3] yet he loved not nature for her own sake. He had what Tyndall calls the "scientific imagination."[4] The perception of beauties of landscape or of the sea and the discovery of natural processes unnoticed by the common throng awoke indeed a responsive chord; but all these forthwith were made to serve in the illustrating or enforcing of some truth, took their place in his philosophic system. In the presence of the problem of the universe he had

[1] Cf. e. g. 1, 102; 4, 110.

[2] See especially the splendid passage 5, 1204 *et seq.*

[3] Cf. Humboldt, 'Cosmos,' Eng. trans. ii. 382–3; Schlegel, 'Hist. of Literature' trans. pp. 66–8.

[4] 'Belfast Address'; see 'Fragments of Science,' 5th ed. p. 480.

no time nor inclination to indulge the pleasures of taste. He knew the changes of color in the sea with the passing of clouds and the storm.[1] He had stood upon a mountain's height and seen how, far away in the distance, the movement and tumult of the plain seem motionless and still.[2] He had observed the wearing away with time of ploughshares and finger-rings;[3] the gathering of mist in garments by the sea-shore;[4] the fantastic shapes of clouds like trees and giants;[5] the tints given to sunlight shining through colored canvas.[6] He had noticed the glint of colors from the plumage of birds;[7] the motes dancing in the sunbeam;[8] the myriad forms of the shells along the 'thirsty sand of some inwinding shore.'[9] The presence of power impressed him, whether it was manifest in the disciplined movement of great bodies of men or of ships,[10] or in the conflict of the elements dashing to ruin the results of human toil,[11] or in the operation of that mysterious 'unseen force'[12] that strikes even the philosopher with awe. Though with full appreciation of their beauty and sublimity, he dwelt on these and the like conceptions only for their philosophic bearing and import.

Lucretius did not write for the mere pleasure of artistic construction. He had an aim outside himself. Seeing that human life is full of cares and troubles, he believed that the cause of these was fear of the gods and death.[13] So he thought that if he could prove there are no gods and life ends with the grave he would be rendering the greatest possible service to mankind. For his fellow-men he toiled; perhaps also he wished fully to convince himself of the momentous truths he would fain accept, which were so opposed to the beliefs of the masses and

[1] 2, 766–7.

[2] 2, 323–32; cf. 2, 308–22. Just such a glimpse the traveller to-day catches from the top of the Alban Mount looking down toward Rome.

[3] 1, 311 *et seq.*

[4] 1, 305–8.

[5] 4, 136–41; 6, 134.

[6] 4, 75–83.

[7] 2, 801–7.

[8] 2, 114–20. Aristotle used the same illustration.

[9] 2, 374–6.

[10] 2, 40 *et seq.*

[11] 1, 280–9, etc.

[12] 5, 1226 *et seq.*

[13] See nn. to 1, 62, and 3, 37. Cf. also, Ribbeck, 'Geschichte der Römischen Dichtung,' I. p. 276.

the deepest instincts of the heart. Composition was not easy for him;[1] and he wrote in verse simply to make his doctrine more palatable to those whom it was intended to deliver.[2] Here then is a character of singular moral strength, that for the good of men set before himself the great task of revealing the truth,— 'the way of life.'[3]

Nevertheless Lucretius was not one that moved much among men in their daily walks. He does not speak of the Forum, the busy streets, the centres of interest in the life and society of Rome, so often referred to by the Latin poets. He knew well the pleasures of contemplation. When he speaks of the struggle for office, the ambitions and passions of the mass of mankind,[4] it is in the manner of one who views these things from a distance, who in a life of retirement grieves at the folly of those that never find true happiness.[5] Still he was by no means ignorant of human nature nor indifferent to the issues of his time. With milder irony he touches upon the little weaknesses of men;[6] but he lashes with stinging satire the mad race after wealth and honors, the misguided search for pleasure, the religious conceptions of the masses, the social degeneracy of the day.[7] Yet he had a sympathy with suffering, which a glimpse of tenderness now and then reveals.[8] A hater of cant,[9] the Carlyle of his age, he had no patience with sham, and rebukes the blind restlessness of men that are ever seeking they know not what.[10] He was an earnest patriot;[11] little doubt that in his stern censure of contentions about position we may trace a reaction against the ferment and turmoil in political life that he must have witnessed in the years just preceding his death.[12] He finds the only hope of peace and abiding joy in 'philosophy, guide of life.'

[1] See 1, 141–5, and n. to 137–9; 3, 419–20.
[2] 1, 936–50.
[3] 2, 10.
[4] 3, 59 *et seq.*; 3, 995–1002, *et al.*
[5] 2, 1–19.
[6] 1, 641–4; 2, 1024 *et seq.*; 4, 594.
[7] See 2, 1093–1104; 6, 387 *et seq.*; 5, 1007–10 and n.; 2, 48–53, *et al.*
[8] 2, 349 *et seq.*
[9] 3, 41–58.
[10] 5, 1120–35; 3, 1153–9.
[11] 1, 40–3.
[12] See nn. to 3, 59; 5, 1120.

Yet the poet had little faith that his efforts to free men from their bondage would ever reach or aid them. Gloomily he came to think that they do not wish to know the true reason. They will ever wander in error. An undertone of sadness runs like a minor chord through the entire poem. Lucretius has been called, with a certain fitness, the poet of death.[1] But he is not a pessimist; he is the poet of progress.[2] He sees indeed a decline in nature's powers;[3] but in civilization he thought his day marked the highest goal yet reached.[4] The sense of the misery and the folly of humanity seemed ever present with him, a dark cloud brooding over his life.[5] Indeed it may be doubted whether Epicureanism, with all its boasted delights, is even at the best a happy system. The keen, reflective mind that would grapple with the fundamental realities of being can hardly find much to cheer or comfort in the doctrine of a world without a divine will, duty with no guide but self-centred pleasure,[6] death everlasting; and it sees that those who profess belief in these things show a marked tendency to fall into revolting self-indulgences. Then, too, Lucretius was to the core a Roman. He represented a folk-character that in its view of life and duty was stern, unyielding, the very opposite of all that is light and joyous. To him, with no hope in the hereafter, the wail of helpless infancy is a fitting prelude to life's miseries.[7] All things are ever the same.[8] There is only a circumscribed round of joys; when this is completed, better die and return to eternal slumber than live a life with no new pleasure.[9]

In Lucretius we find an earnest seeker after truth. He paused before the facts of being to question why, whence. whither. Having found what he thought the true theory of things, he devoted himself to it with all the enthusiasm of an ardent and refined nature, clothed it with the poetic forms of a

[1] Cf. 3, 830 to end.
[2] See n. to 5, 332–5.
[3] 2, 1150–74; 5, 797–836.
[4] 5, 1448–57.
[5] 2, 569–80; 2, 75–9; 5, 195 *et seq.*
[6] Cf. Prov. xiv. 12–13; Tennyson, 'Palace of Art.'
[7] See 5, 222–7 and n.
[8] See 3, 945 and n.
[9] 3, 1076 *et seq.*

powerful imagination, gave himself to setting it forth in noble language for the enlightenment of his fellow-countrymen. Whatever the defects or inconsistencies of his philosophy, we may well pay homage to the exalted purpose of the man, the high genius of the poet.

II. LUCRETIUS AS A PHILOSOPHER.

i. Philosophy among the Romans in Lucretius' Time.

The genius of the Romans was adapted to practical rather than artistic construction. They wrought out the greatest results and made the most valuable contributions to humanity in the domain of politics and law. For the arts, literature, and philosophy, for all that has to do with the culture of life as distinguished from its bare necessities, they were indebted to the Greeks. The Greek masterpieces and verse-forms furnished them models for literary composition. Greek artists and sculptors painted and carved for them. Greek teachers gave them instruction in music and the liberal arts. Finally, the imitation of the Greeks in many of the ways of common life became the fashion. In the contact of the two diverse forms of civilization, the one characterized by power of military and civil organization, the other by the pre-eminent influence of the individual mind and the development of taste, that founded upon force prevailed over the other only to be shaped by it. 'Greece, conquered, took captive her rude conqueror, and brought the arts to rustic Latium.'[1]

When the Romans first began to have leisure and a taste for speculation, the Greek systems had already reached their fullest expansion. The rapid extension of Roman territory under the old Republican form of government was then placing before young men new political prizes to be won by personal power.

[1] Hor. Ep. 2, 1, 156–7.

A great impulse was given to education, especially that part of it concerned with the training of the orator. With progressive enlightenment the old religion lost its hold on the higher classes. Something was needed to take its place as a guide to duty. Shaking off the shackles of a confused and corrupting polytheism, the best minds of Rome awoke to a full realization of the mysteries of existence, and sought a theory of things in which they could find rest. The Greek philosophy seemed to meet all needs. To it the Romans turned, partly indeed as fitting for a public career by training the mind and broadening the culture, but also as furnishing a rational explanation of the universe, and a rule of life in the place of discarded superstitions. The Greeks loved speculation for its own sake; the Romans only for its practical bearing. The Greeks made systems; the Romans put them to the test by living them out in daily life. From the time of Socrates the tendency of the Greek philosophy had been to become more and more ethical and practical; among the Romans this tendency was intensified because of the trend of the national character. It was the mission of the Greeks to originate a philosophy; of the Romans, to find for the world the true value of this as a means of putting man in harmony with his environment. Knowledge was of course confined to the higher classes. It was only by the precepts and the examples of the lives of these that philosophy had influence upon the masses.

In Lucretius' time all the principal Greek schools were represented at Rome. There were only four of special prominence, the Stoic, the Peripatetic, the New Academic, and the Epicurean. The Stoic doctrine, from the significance it gave to natural law, and from its rigid code of duty, was especially adapted to the Roman character, and had the greatest following. The Peripatetic differed from the Stoic mainly in the position that in comparison with virtue other things are entitled to consideration, while the Stoic held that they are not. The adherents of the New Academy, accepting probability as the basis of their speculation, were eclectic, and gleaned from every source; gen-

erally they were in sympathy with the teachings of the Stoics and Peripatetics. The Peripatetics and Academics were not many, but exerted no small influence. The Epicureans were numerous in Italy;[1] but they had had only wretched expounders of their system,[2] and were held by the others in contempt. The Academics sneered at their self-satisfied dogmatism. The Stoics and Peripatetics assailed in particular their doctrine of pleasure as the source of duty and their rejection of the argument from design, heaping ridicule upon their 'do-nothing gods.'[3] The common crowd shrunk back from them[4] because, instead of adapting their system to the popular faith, as the others did, they denounced this as the prolific source of ills. Under such circumstances Lucretius stood forth boldly as the champion of the Epicurean philosophy, which even then was beginning to number among its disciples some of the most famous men of Rome.

ii. Epicureanism up to the time of Lucretius.

Epicurus was not a great originator in philosophy. The doctrines to which he left his name were mainly borrowed from the Atomists and the Cyrenaics. He added little of his own, but gave to tenets drawn from others the impress of unity and a systematic exposition. In order therefore to understand the genesis, content and relations of the præ-Lucretian Epicureanism it will be necessary to touch briefly upon several phases of the early Greek speculation.

The Greek philosophers, before the time of Socrates, concerned themselves chiefly with the universe. The early Ionians looked upon matter as endowed with life. Starting with a single form of matter, they thought the present order of things has resulted from progressive changes, the simple of itself going over into the complex. Thales supposed that this primitive sub-

[1] See n. to 5, 20.
[2] See n. to 5, 336–7.
[3] Cic. N. D. quoted in n. to 5, 149.
[4] 1, 943–5.

strate was water; Anaximenes, air; Anaximander, an infinite, indefinite substance. The Pythagoreans grasped at the idea of the essential difference between spirit and matter, but yet were not able in their thinking to purge matter of psychical qualities; hence their doctrine of the world-soul. The Eleatics recognized more clearly than they the antagonism between matter and spirit, but relegated the former to the domain of pure phenomena, denying the reality of change and making being and thought identical; to them the universe was one vast, changeless thought. Heraclitus[1] assumed fire as the fundamental matter, and attributed to it psychical properties, taking it as both cause and symbol of change, the reality of which he maintained in opposition to the Eleatic doctrine. The Atomists rank with Empedocles[2] and Anaxagoras[3] as the first who made complete severance of the physical and the psychical, — matter and moving cause; and who, in order to explain changes and the on-going of the universe, assumed the operation of some principle entirely outside of matter and above it. Empedocles taught that there are four ultimate forms of matter, or elements; and two influences, or directing forces,[4] acting upon them. Anaxagoras assumed an indefinite number of primitive substances, infinitely divisible, and a rational force as final cause. Midway between the two came the Atomists, who made an advance upon Empedocles in positing a single ultimate matter, made up of indivisible particles, the different shapes of which explained the possibility of all combinations; but they adopted a less philosophic conception of moving cause than Anaxagoras, appealing to the inadequate law of necessity.

The Atomists were two, Leucippus and Democritus. Of the former little is known save that he furnished the basis of the theory of the latter. Democritus[5] was born about 460 B.C. According to him there is matter, or the "full;" and there is "void," or space devoid of matter. The latter must be consid-

[1] See n. to 1, 638. [2] See n. to 1, 716. [3] See n. to 1, 830.
[4] See n. to 1, 31. [5] Cf. 3, 1041 and n.

ered as having existence equally with the former.[1] Matter is made up of particles which are invisible, underived, indivisible, impenetrable, imperishable, — the atoms. These are all alike in nature, and of the same specific gravity. They differ in form, being of numberless shapes; hence also in size and weight. They are distinguished, moreover, by differences in arrangement, or order, and position. They are the changeless substrate underlying everything. The atoms are always moving; their natural movement is downward in straight lines, because of their weight. All things are made up of combinations of atoms. In every combination there is void, as only the atoms are perfectly solid. Things undergo change by the shifting about of atoms in different order and relative positions. The various qualities that are perceived in things are not properties of the atom, but accidental properties of the combination. Life thus is an accident of certain atom groups. There are four combinations of special permanency and importance, inasmuch as they are wrought into many others, — fire, air, water, and earth.[2]

As space is unlimited and atoms are numberless, there is an infinite number of worlds. These are all the time coming into existence, dissolving back into atoms. As the atoms fall in infinite space the heavier go faster than the lighter, impinging upon them; these are forced upward and sidewise, get entangled because of the different shapes, and form thus a mass to which the composition of motions gives a rotary movement. The mass receives constant additions as it goes whirling through the cloud of falling particles, and in time a world is produced. This result happens by the law of necessity. From such a combination our world came. As the atoms settled together the lighter were forced out. The lightest formed a close enveloping circumference, or sphere; those of more weight, the heavenly bodies, which caught fire from moving in the air, itself composed

[1] In opposition to the Eleatic doctrine that not-being is not.

[2] In this the influence of Empedocles is shown.

of atoms of medium weight. The heaviest of themselves drew together, giving rise to the earth; as this became compact, light, round particles were squeezed out into the hollow places, making the sea. The earth, formerly moving about, is now stationary, at the centre of the world; it has the shape of a flat cylinder. From it, when fresh and moist, plants and animals arose.

For the gods the system of Democritus left no room. But in the course of nature he recognized something that he called divine, and he seems to have been inclined to an allegorical interpretation of the popular beliefs. Man he revered as nature's highest work, dwelling at length upon the symmetry of the human form, the adaptation of part to function, the unity and perfection of the whole. The soul, he taught, is composed of the finest and roundest atoms, and it is distributed through the body as the animating force and source of movement. The body is sustained by food and drink; but the atoms that nourish the soul are taken in with the breath from the air. With exhalation soul-atoms pass off.[1] In certain parts there is as it were a concentration of soul; thought originates in the brain, anger in the heart, desire in the liver. Sense-perception arises from the constant passing off of thin films from the surface of things. These strike upon the air, which acts on the senses; thought is immediately produced. Thought is thus due merely to a change among the soul-atoms, brought about by the impact of something outside the body. Still, the senses do not reveal truly the external world. By some process, which the philosopher assumes but does not explain, the thought is able in the midst of change to seize upon the changeless, the atom, which is far below the ken of sense; and to know the void, which the senses cannot; and to rise to the conception of a fixed order in the universe, the law of necessity.

The soul, said Democritus, is the noblest part of man. The body is merely its vessel,[2] and should be made subject to it. The best thing in life is a cheerful contentment. Action should

[1] Cf. n. to 3, 926–7.

[2] Cf. n. to 3, 440.

aim at happiness; yet this should be sought in pleasure not of the body but of the soul. Wisdom brings self-mastery; without it life lacks enjoyments, death's terrors appall. Ignorance is the source of all faults.[1] For him that wants little a little suffices; but greed begets greed and wrecks all happiness.[2] It is the almost universal testimony of antiquity that the philosopher well lived out the maxims he laid down.[3]

With Socrates came a change in the trend of Greek thought. Cicero says of him that 'he called philosophy down from heaven, and made her to dwell in cities, and brought her even to men's houses, and caused her to make inquiry about life and character and things good and evil.'[4] The attention of philosophers was now directed not so much to the problem of the universe as to that of man, to settling the vexed questions of human life. But Socrates was too broad a man to be fully comprehended by his generation. Most of the schools that owed their originative impulse to his teachings reflected these only partially and imperfectly. Two in particular, the Cynic and the Cyrenaic, grasped each but a single phase of doctrine, and made it alone the basis of a system of morals; hence were developed two ethical theories diametrically opposed to each other. Socrates taught the intimate relation between virtue and happiness. He enjoined the life of virtue, which he made to consist in actions directed solely by reason under all circumstances; but he clearly conceived as an aim to this only the happiness resulting therefrom. Antisthenes and the Cynics expanded the virtue-aspect of the teaching, and laid down a harsh rule of actions, choking out utterly the influence of the feelings, and at the same time imitating all that was rigid and repulsive in the Socratic life. But Aristippus and the Cyrenaics emphasized the doctrine of happiness, making happiness the sole aim of life, pleasure the

[1] See n. to 3, 15.

[2] Cf. 5, 1119 and n.

[3] For fuller discussion of the Atomists see the histories of phil. by Ueberweg, Ritter, Schwegler, Lewes; especially Zeller, 'Prae-Socratic Phil.' vol. ii.; Lange, 'Hist. of Materialism,' vol. i.; and Brucker, 'Historia Critica Philosophiae,' Vol. i.

[4] 'Tusc. Disp.' 5, 4, 10.

supreme good. According to them the enjoyment of the present moment is man's highest duty. The wise man will avoid all things causing pain; he will fill each moment with agreeable sensations, for in this true pleasure consists. Still, the search after happiness must be guided by reason. The wise man will govern his pleasures, not be governed by them. The highest happiness can be gained only by rational pursuit of it.

By the latter part of the third century B.C. the Greek civilization had reached the highest point of its development and was sinking in decline. The products it had matured were no longer the possession merely of the Hellenic peoples, but were being disseminated over the whole ancient world. The old freedom and independence of the political life had given place to stagnation under a foreign sway. The energy and versatility that had been wont to find exercise in public affairs were now turned to channels of private life. A higher significance than before was attached to friendship and the amenities of society; the virtues of private life were more discussed and extolled. The result of the reflection of the generations since Socrates' death upon the moral nature — reflection intensified by the increasing degeneracy of the times — was to force upon the thoughtful the belief that there is somehow a lack of harmony between man and his environment. All agreed that man is fitted for the enjoyment of life; yet none are happy, none are truly wise. Perfect happiness can arise only from a perfect adjustment of the individual with his surroundings. How can this be brought about? Three schools of philosophy arose, with three different answers. The Stoic, enlarging upon the Cynic principle, sought to make the mind supreme over the body, the man supreme over his surroundings; and found the source of happiness in an unswerving obedience to the laws of being, in an attitude of absolute indifference to all things outside one's self, and even to the states of the body. With exactly opposite tendency the Epicureans tried to reach the same end by making the external world, one's surroundings, satisfy all possible de-

sires, by a life of rational indulgence. The Sceptic, on the contrary, believing that the truth about things cannot be known, and that all the troubles of humanity come from adherence to unfounded opinions, endeavored to attain happiness in peace of mind gained by withholding judgment regarding all matters, by maintaining an absolute imperturbability. Thus the philosophy of Epicurus, like the doctrines of the Atomists and Cyrenaics, from which it was so largely derived, by no means stands alone, but forms a part of a general movement, and can be studied to advantage only in connection with the thought and life of the time.

Epicurus was of Athenian descent, born at Samos about 342 B. C. When thirty-six years of age, it is said, he came to Athens, and founded a school of philosophy, which met in his garden. For thirty-six years he conversed and taught, gathering about him a band of earnest followers that admired his ability, reverenced his character, and drank in his doctrines. Notwithstanding the slanders heaped upon him, his life seems to have been, if not altogether above reproach, at least better than that of most of his contemporaries. His system was practical, being concerned with physical speculation and dialectic only as a means of establishing ethical principles. In this he differed from the Atomists, who sought knowledge of the universe for its own sake. In accordance with the division of philosophy current in his time, he divided his system into ethics, physics, and dialectic, considering the two latter as entirely ancillary to the first. Dialectic (or logic) he restricted to one part, the canonic, or test-science of truth. His theory of knowing was drawn principally from the Cyrenaics. For a few distinctions he was indebted to Aristotle.[1] Sense-perception in his system belonged under the head of physics. He agreed with the Atomists except in supposing that the films from the surface of things, instead of acting on the senses by means of the air, strike upon them directly, and even penetrate to the mind. The old physics and ethics in

[1] Cf. nn. to 1, 450; 3, 136.

his hands both underwent expansion, and were somewhat modified. He saw that if atoms are assumed to be of an infinite number of shapes, some may be infinitely large, which would be inconsistent with the belief that the atoms are invisible. He held, therefore, that the shapes of atoms are finite in number, but that the atoms of each form are numberless. Observing, moreover, that in a vacuum all bodies must fall equally fast in parallel lines, he rejected the teaching that in the void the heavier atoms falling strike the lighter; he supposed that the smaller atoms swerve a little from a straight downward course, and that thus by mutual entanglement a world nucleus is formed.[1] The cause of the swerving to one side he assigned not to the operation of the law of necessity, but to a sort of inherent power, an originative impulse of motion in the atoms themselves; in this he found the origin of the power of free movement, and the source of the freedom of the human will. Epicurus, moreover, believed in gods; but he denied them all concern in the changes of things.[2] In ethics he differed from the Cyrenaics regarding the nature of happiness. He did not limit it to a continuance or succession of pleasurable sensations, but found it also in perfect freedom of the body from pain and the soul from care or anxiety. He thus recognized a negative as well as positive side of happiness. He enlarged upon the Cyrenaics' doctrine of pleasure as the supreme good, and emphasized as much as they the rational pursuit of it. The sage will be a careful reckoner of pains and pleasures. All actions in which the pains are going to predominate he will refrain from; all which involve the more pleasure he will engage in. The remaining doctrines of Epicurus may be best considered in discussing the presentation of his philosophy by Lucretius.[3]

[1] Cf. Cic. de Fin. 1, cap. 6.

[2] See n. to 3, 18 and references there.

[3] Cf. Woltjer, 'Lucretii Philosophia cum Fontibus Comparata;' Bruns, 'Lucrez-studien;' Schwen, 'Ueber griechischen und römischen Epikureismus' (program); Brieger, 'Epikurs Brief an Herodot,' § 68-83 (prog.); Bockemüller, 'Studien zu Lucrez und Epicur;' Reisacker, 'Epicuri de animorum natura doctrina a Lucretio tractata;' Reisacker, 'Der Todesgedanke bei den Griechen,' written with special reference to Epicurus and Lucretius.

iii. Epicureanism as set forth by Lucretius.

Lucretius followed Epicurus as unerring guide.[1] In his poem, however, he did not attempt to expound the whole Epicurean philosophy. Having in view a definite aim,[2] he set forth only those portions of Epicurus' teachings necessary to the attainment of it. He treats in detail only the views on nature, striving by his theory of the universe and the development of civilization[3] to banish all fear of the gods, and by his proof of the mortality of the soul to dispel the dread of death. Interspersed with his physical doctrines, however, there are many ethical reflections[4] that give an insight into his views of life and duty. If the lost work of Epicurus 'On Nature'[5] were extant, doubtless Lucretius' poem throughout would be found to bear a close resemblance to it. Whatever the poet teaches may be accepted as also the doctrine of his master; only when carried away with poetic inspiration does he step out of the beaten track of the school to which he belonged.[6] Lucretius' exposition may be conveniently treated under four heads, — theory of knowledge, theory of the universe, theory of organic life, view of man.[7]

1. Lucretius' Theory of Knowledge.

Knowledge of things is gained through the senses. These never err; upon them depends all reasoning.[8] From the surface of things films of matter, the idols or images, are continually thrown off. They are exceedingly thin, of exactly the same

[1] See n. to 3, 3.
[2] See p. xiii.
[3] Cf. n. to 5, 925.
[4] Cf. 5, 1117 and n.
[5] See n. to 1, 25.
[6] Cf. n. to 5, 402, etc.
[7] It has not been thought necessary either in the preceding section or here to treat those parts of the Epicurean philosophy not taken up by Lucretius. For full discussion reference should be made to Cic. 'N. D.' bk. 1; Cic. 'De Fin.' bks. 1 and 2; Diog. Laert. 'Vit. Phil.' bk. 10; the treatises on anc. phil. espec. Zeller, 'Stoics, Ep. and Scep.'
[8] 1, 693–4; 4, 379; 4, 469–521.



shape as the bodies from which they come, of movement inconceivably swift.[1] From the contact of these with the eyes vision results. A square tower in the distance appears round, because the idols in passing through the air are blunted, and have the sharp corners worn down. From polished surfaces the idols rebound; hence the reflection of mirrors. But they pass through certain substances, as glass, so that the sight is not hindered. To men with the jaundice things look greenish because of the greenish particles thrown off from the eyes, which meet the coming idols and tinge them with that hue. The eyes cannot bear to look at the sun because of the impinging force of its idols and the seeds of fire in them.[2] The sense of hearing distinguishes different sounds according to the different kinds of atoms in them; for that sound is of material nature is made clear by the hoarseness following much use of the voice, which results from the friction of sound-atoms as they pass out of the throat. The penetrating power of sounds shows how minute the sound-atoms must be.[3] The senses of smell and taste experience pleasure from the contact of smooth atoms, discomfort from the presence of those rough or jagged.[4]

The finest idols even penetrate directly to the mind, which is fitted thus to receive impressions from its physical nature. Sometimes there is a mingling and confusion of idols in the air, and mongrel forms seem to be perceived to which there is no bodily reality corresponding; from such originated the conceptions of Centaurs, Scyllas, and the like.[5] As idols innumerable, of things past as well as present, are ever thronging before the mind, it admits in waking hours only those that it wishes to receive; hence the power of memory.[6] In slumber too the idols come, and then men have dreams, sometimes even horrid visions of monsters and human figures larger than life, and the forms of the dead.[7] In the relation of the senses to the things perceived and the phenomena of sensation no evidence of design

[1] 4, 42 *et seq.* [2] 4, 217–378. [3] 4, 524–614.
[4] 4, 615–705. [5] 4. 724–48. [6] 4, 777–817.
[7] 4, 907 *et seq.*

can be found.[1] The processes of generalization from the products of sense-perception and the formation of judgments the poet does not touch upon. Thus in common with his school, he assumed immediate knowledge of things, and found the only source of knowledge in experience.

2. Lucretius' Theory of the Universe.

There are two elemental parts of the universe, matter and void. All things are made up of these. Void is everywhere where matter is not; matter and void are mutually exclusive.[2] Matter is composed of atoms. These are perfectly solid, without beginning or end or any possibility of change in nature, minute beyond the limit of vision, and known only by the mind.[3] The atoms differ in form; they are rough, smooth, hooked, round, larger, smaller; but the various shapes are limited in number, though there is an infinite number of atoms of each shape. They differ also in weight. The movement of atoms is immeasurably swift, and always downward, because of their gravity, unless impeded. Everything that exists contains void as well as atoms, since only these are devoid of empty space.[4] Color, heat, cold, moisture, dryness, all the properties that can be detected in things, are accidents of the combinations of atoms; the atoms themselves have no properties save extension, hardness, weight, and motion. All combinations are unstable, continually changing. Dissolution awaits everything.[5]

The universe is without limit in any of its dimensions, and has no centre. There is no end to space, and atoms are numberless. There is an infinite number of worlds.[6] As the atoms fall in infinite space, some by their own power swerve to one side.[7] These become involved with others, forming a whirling

[1] 4, 823–57.
[2] 1, 265 *et seq.*
[3] 1, 600; 1, 265–328
[4] 2, 581 *et seq.*
[5] 2, 730–864; 2, 1105–74.
[6] 1, 951–1113; 2, 1050 *et seq.*
[7] 2, 216–93.

vortex, the beginning of a world. Thus the world in which we are, originated. At first there was a chaos of clashing and entangled atoms. Then gradually came a differentiation into parts, like gathering with like. The heaviest particles settled in a mass. Out of this the lightest and smoothest were pressed, forced to the outermost bounds, and there united in a close-woven, enveloping sphere, the aether. Beneath this the air spread out. Midway between the aether and the earth the atoms heavier than the one, yet lighter than the other, gathered, forming the sun and moon; some passing higher still made the stars. The earth as it settled together grew rough in ridges and plains, mountains and valleys, as the parts of its surface being of unequal density could not give way the same. Into the hollow places the smoother atoms were pressed, making the sea.[1] The earth is in the mid-region of the world. Underneath it lies a nature with which it is closely united, akin to the air above. Its weight diminishes below, so that it rests in calm poise.[2] Around it with unequal speed the heavenly bodies revolve in lateral orbits.[3] The sun and the moon are of the same size that they seem to us to be.[4] Our world, like all things else, is doomed to destruction.[5]

In the explanation of natural phenomena it is idle to assign but one cause, and declare that this must be the correct one; for the truth cannot be known. He that is wise will give several causes, any one of which will be adequate to account for the phenomenon under consideration without the aid of the gods.[6] Eclipses may be brought about by the interposition of some body that cuts off the stream of light, or by the going out of the fires of the sun and moon, or in other ways.[7] Day and night may result from the sun running his courses under the earth and above, or from the waning of its light through lack of

[1] 5, 432 *et seq.*

[2] 5, 534. For the shape of the earth see n. to 5, 534.

[3] 5, 509–33.

[4] 5, 564 *et seq.*

[5] 5, 91 *et seq.*

[6] See 5, 526–33 and n. to 531.

[7] 5, 751–70.

fuel at fixed times.[1] Thunder is produced by the collision of clouds, or by the bursting of clouds from pent-up wind, or the blowing of the wind violently through them, or the conflict of inharmonious elements in them. Flashes of lightning are seen when the clouds for some reason have struck forth seeds of fire. Thunderbolts are forged by the wind compressing the clouds, and forcing the elements of heat into a fiery mass; this falls with so great violence partly because of the impulse given it by the condensed cloud driving it forth, partly by reason of its own weight and the exceeding fineness of the particles of which it is composed.[2] Water-spouts are made by the confinement of wind in a cloud, when the power of the blast, not being sufficient to burst it, forces it down to the surface of sea or land.[3] Volcanoes are formed when the wind, imprisoned in vast earth-caverns, by its pressure melts portions of rock, and forces forth the molten mass, together with much sand brought in its way by underground channels from the sea.[4] The violence of these winds, and sometimes the falling in of the cavern roofs, are causes of earthquakes.[5] The alternate warmth and coolness in some wells and hot springs may be explained by the shifting of particles of heat from earth to water, or from water to earth, with the alternate contraction and expansion of the earth by day and by night or at different seasons.[6] The power of the magnet results from this: that the atoms in it by their blows continually force the air away from it on every side; into the vacuum thus produced rush all other bodies not for some reason held back.[7] Disease and pestilence have their origin in the tainting of the air by elements baneful to life.[8] In this way purely natural causes can be assigned for everything that happens. If it were not for the groundless fears that burden the souls of men there would be no need of studying the processes of nature.[9]

[1] 5, 650 *et seq.*
[2] 6, 96–422.
[3] 6, 423–50.
[4] 6, 639–711.
[5] 6, 535–607.
[6] 6, 840–935.
[7] 6, 906–1089.
[8] 6, 1090 *et seq.* For other nat. phen. consult analysis of book 6.
[9] 5, 1183 *et seq.* and n.

In the spaces between the worlds the gods dwell. Their bodies are of the most subtile matter. They have nothing to do with the on-going of things or the life of men; they enjoy peace that can never be disturbed, bliss incapable of increase, and unending.[1] The present order of things is too full of imperfection to admit of divine workmanship; and the gods, even if able to make the world, could have had no motive to trouble themselves with creating, nor model to work from. There is no divine power in the universe, no shaping and directing mind.[2] There is no design in the present order of things. All results from the chance concurrence of atoms moving from eternity in infinite space.[3] Nothing exists but something exactly like it in the past was, or in the present is, or in the future shall be; for in the infinity of time and space like conditions will be repeated, like results follow. Perhaps the matter that now makes up our body and soul in far distant time may just as now be gathered and united in a breathing form; yet that will not be the present self, since the thread of personal identity will have been broken.[4]

Nevertheless, the chance that presides over the genesis and dissolution of all things is not mere accident. There is a fixed order in things. Lucretius well illustrates the legal trend of the Roman mind; he grasped the unity and harmony that underlie all natural processes much more clearly than his master. No one ever held more firmly that nothing can happen without cause. Behind the proximate he is ever seeking the ultimate. To him the universe is the manifestation of eternal change under the reign of law. This is why he rejects with so bitter scorn the paltry gods of the mythology. Pitiable creatures they were, each with his circumscribed sphere of activity, dividing the universe up into so many parts, and all the time wrangling about trenching on each other's prerogatives, sporting with natural forces, full of jealousies and bickerings! To Lucretius,

[1] See 3, 18 and n., *et al.*

[2] 5, 146–194.

[3] See 1, 1021 and n.; 4, 823–76.

[4] 2, 1023 1104; 3, 847–61.

with thought fixed on the order and regularity manifest on every hand, such a doctrine of natural causes seemed mean and low enough. So not seeing that behind law there must be a law-giver, he stopped with the conception of law itself. This satisfied the groping of his mind for a unifying principle that should explain the mysteries of natural phenomena. To it he constantly appeals in setting forth causes. By means of it he accounts for the regularity of the seasons,[1] the alternation of day and night,[2] and manifold other things in which a certain order is clearly to be seen. Yet Lucretius was no fatalist. He spurns the old law of necessity to which the Atomists appealed. By the swerving of the atoms as they fall in space, the eternal chain of cause and effect is broken; momentous results follow.[3] Herein he is justly charged with inconsistency. He tried to pursue a middle course between inexorable fate and chaotic polytheism. He found the beginning of a world in a fortuitous swirl of atoms brought about by the unreflective self-movement of some atoms out of their course. But the atoms were moving straight downwards, because the law of nature causes bodies to fall unless hindered. They settled to different places for the same reason. Thus in accordance with natural law the world was evolved, its changes go on, its end is fixed. Fixed barriers too hem in organic existence with the invariability of types and the survival of the fittest. In the presence of the laws of nature even man stands absolutely powerless; sometimes they seem a hidden force dashing to nought his mightiest works, foiling his most gigantic efforts.[4] Thus to Lucretius there seemed but one break in the causal relations of the universe. This excepted, he held consistently and emphatically to the reign of law. Nature as the incarnation of law, as the tangible reality through which its operations are manifest, in his thought took on the attributes of personality; seemed a veritable being energizing upon matter in space and time, directing the processes of pro-

[1] 1, 174–98. [2] 5, 669–79. [3] 2, 251 *et seq.* [4] 5, 1233.

duction and decay, having in hand the mystery of mysteries, life.[1] At times Lucretius seems almost a pantheist. He rejected the divine; unconsciously he deified nature.

3. Lucretius' Theory of Organic Life.

Life is spontaneously produced. It is a property of certain combinations of atoms.[2] Decaying clods wet by the rain bring forth vermin; and worms make their appearance in dead bodies.[3] Many animate objects are generated by the sunlight shining upon moist dirt.[4] When the earth was in her prime she produced from herself all manner of living things. First grass came forth, clothing hill and plain; then trees pushed their way out, vying with one another in growing; all these came out on the surface just as bristles upon animals. Afterwards birds came into existence, breaking out of eggs. Finally babes were to be seen creeping from cavities near the surface. The earth, vigorous and full of abundance with unexhausted powers, supplied to them a milk-like liquid, warmth, and a soft bed of grass.[5] Rightly then is she named mother; but now, weak with declining years, she has ceased to bear such forms of life, and even in the products of the field, gained only with severest toil and frequent disappointment, gives indications of approaching doom.[6]

There were monsters too in the earth's youth-time, — hermaphrodites, and bodies footless, mouthless, without hands, sightless, with limbs all massed together. These at once perished, since they could neither get food for themselves nor continue their kind. But even then there were no such impossible beings as Scyllas and Chimaeras; they and the like have never existed save in men's imaginations, and are cause of needless fears.[7] Many kinds of well-formed creatures also perished, and

[1] Cf. n. to 1, 2.
[2] 2, 865–1022.
[3] 3, 713–40; see n. to 713.
[4] 5, 797–98.
[5] 5, 783 *et seq.*
[6] 1, 250; 2, 586–99; 5, 821–36; 2, 1150–74.
[7] 5, 837–54 and 878–924.

did not leave progeny; for only the fittest to survive survived. Craft or courage or speed of flight or usefulness to man has preserved those animals that remain. All the rest, unable to meet the conditions of existence, have been swept off by ruthless destruction.[1] In men and brutes alike, moreover, there is a fixed law of descent. The offspring repeat the characteristics of the parents in both body and temper.[2] Thus among the living things, as well as in the realm of the inorganic, natural law is supreme.

4. Lucretius' View of Man.

In man, as in all things else, there is nothing but matter and void. The human organism comprises three distinct parts, the body, the soul or life-principle, and the mind. These originate, develop, decline, and perish together, for the mind and soul are inseparably united with each other and with the body.[3] The mind is situated in the mid-region of the breast, while the soul is distributed throughout the form; but the mind and soul are so closely connected that they may be considered as one nature. They are composed of the finest round atoms, — not of simple elements, however, but of four separate combinations of atoms mingled together, wind, heat, air, and a subtle, nameless something that makes the fourth.[4] Volitional impulse arises in this last element, which imparts motion to the heat-portion; that in turn to the wind, the wind to the air-essence; thence movement is aroused in the organism. The mind and soul of man differ very little from those of animals. Lucretius does not directly assert that the mind is the noblest part, but this was clearly his opinion. Once at least he identifies personality with it.[5]

Notwithstanding his material nature, man is not an automaton.

[1] 5, 855–77.
[2] 3, 741–75; 4, 1209–32.
[3] 3, 94–160.
[4] 3, 161–322.
[5] 2, 275.



The power of voluntary movement and free-will are due to that swerving of atoms in the void. Had this not occurred he would have been bound and controlled by inexorable necessity.[1] But since there is freedom of will, man has in his own hands the shaping of his character and the directing of his life.[2] The supreme good is happiness; which may be found indeed in pleasures of the body under proper restraint, but principally in perfect peace of mind, like that of the gods. Life is short and ought to be enjoyed.[3] The greatest ills are those corroding fears of the supernatural and the hereafter which religion has inspired, and which vex men and weigh them down under a burden of dread. These the philosopher will entirely overcome.[4] Death ends all. For the wise it has no terrors; indeed, when the pains of life prevail over its pleasures one may rightly take refuge in it.[5] He will make the most of existence who ministers frugally to the body's simple needs, and free from the mad ambitions and feverish passions of the masses, never disturbed by anything, holds to the last the 'high and serene places well fortified by the learning of the wise,'[6] and meets his end with untroubled breast.

The history of the race reveals a continual progression from a lower to a higher stage. The primitive men were utterly savage. They were of larger and sturdier frame than those of to-day, and lived like brutes. Their food was acorns and berries, their drink the running water. Dwellings they had not; they took refuge from the elements in woods and caves. Sometimes they followed wild beasts with clubs, sometimes were pursued in turn, and often in the night were driven in terror from their leaf-strewn beds. Still, the death-rate was not greater than now; for there were no wars, none fell victims to the dangers of the sea, and men were innocent of the use of poisons.[7] The

[1] 2, 251–93.
[2] 3, 319–22.
[3] 2, 75–9; 2, 1171–4; 2, 172 and 258.
[4] 1, 62 and n.; 3, 37 and n. *et al.*; 2, 1 *et seq.*
[5] 3, 417–1094.
[6] 2, 7–8.
[7] 5, 925–1010.

beginnings of a better life came with the discovery of fire. Men learned the nature of this from the igniting of things by lightning or from the flames produced by the rubbing together of the branches of trees. They could now warm their shivering bodies, and the sun taught them how to cook their food. Then came the use of clothing of skins, the building of huts, and the institution of marriage with its softening influences.[1]

Language originated not by invention but by nature. Certain sounds came naturally to express certain feelings or designate particular objects, just as the untaught gestures of infants and the cries of animals convey a meaning that can be understood.[2] Men more gifted than their fellows found out better ways of doing things, and taught the others. Kings arose, who began to build cities and citadels. There was a division of lands and of cattle, according to beauty of person, physical powers, and pre-eminence of ability. But soon men discovered what wealth is; and it brought in its train a throng of baneful ambitions, wrenching well-deserved honors from the natural leaders. The kings were overthrown, and society went back to utter anarchy. Finally, weary of constant strife men agreed to keep the peace with one another, holding the weak in mutual protection, and forcing wrong-doers to respect fair laws.[3] The origin of religion is to be found partly in visions in which forms larger than life and images of the dead seem to be present, partly in the wondering awe with which men looked upon the phenomena of the heavens, the sun, moon, stars, meteors, lightning, hail, snow, and rain. Ignorant of the causes of things they attributed the mysterious processes of nature to the gods, and made for themselves cruel masters; hence all manner of degrading rites, the greatest crimes, and evils innumerable. There is no piety in complying with the observances required by religion.[4]

The metals were discovered in the burning of forests, for thereby veins of ore were melted, and ran into hollow places

[1] 5, 1011–27; 5, 1091–1104 and nn. [2] 5, 1028–90. [3] 5, 1105–60.
[4] 5, 1161–1240.

on the surface. At first copper was used for all purposes, because it was easier to work ; the nature of iron was found out in the effort to get the most effective weapons for warfare.[1] In pursuance of the same end they trained horses and elephants for military purposes. Bulls, boars, and lions too they tried; but the fierce nature of these was stirred by the fray and they brought destruction on friend and foe alike. It is likely that these were made use of only by the vanquished, to whom every other resource had failed.[2] As men advanced in civilization weaving was invented, at first carried on by men, afterwards given over to the women.[3] Planting and grafting men learned from observing the processes of nature, singing from the attempt to imitate the notes of birds; while the blowing of the wind through hollow reeds gave the first idea of the pipe.[4] Later the alphabet was invented; towns and fortifications were made; ships covered the sea; cities bound themselves together by fair treaties; and the poets began to tell of deeds in verse. Commerce and the improvement of agriculture, the building of roads, the making of better laws, and other things of the kind, prepared the way for the refinements of life. Men now became acquainted with paintings, fine statues, and various forms of luxury. Thus step by step man progressed from the lowest stage, learning one thing after another. In his own age, thought Lucretius, the arts had reached their highest point.[5]

iv. Lucretius in the Light of History.

1. The Mission and Influence of Lucretius in Philosophy.

The subject-matter of the *De Rerum Natura* in its leading arguments and ideas is Greek, but the spirit is thoroughly Roman. The temper of the Romans was "too stubborn to

[1] 5, 1241–96. [2] 5, 1297–1349. [3] 5, 1350–60. [4] 5, 1361–1435. [5] 5, 1436–57.

acquiesce in the absolute authority of the Greek philosophy, though their minds were not inventive enough to establish a rival by its side."[1] Lucretius ought not to be considered a servile imitator of Epicurus. The doctrines which he accepted he ardently believed in; and he fully assimilated them in both their general range and minor details. When, therefore, for the sake of his countrymen he began to expound them, they came forth glowing from the depths of his heart and soul, and bore not simply an individual but a distinctively Roman stamp. No work of the entire literature shows more clearly the bent of the national character. The earnestness of purpose, the freedom from quibbling or sophistry and the straightforward grappling with leading questions, the emphasizing of the simpler modes of life and the homelier virtues, the stern and solemn, even gloomy view of existence, — all point to traits not merely of the man but also of the nation.

The poem also indicates clearly the tendencies of the age. It is a protest against the degrading influences of impure superstitions; against the sham and increasing degeneracy of society; against the reckless, mad ambitions and ceaseless ferment of political life. In a period grossly matérial in tastes and enjoyments, when great fortunes were being rapidly made and were ever bringing new luxuries in their train, it bids men take refuge and find true happiness in higher things, in pleasures of the soul rather than the body. The mission of Lucretius was to set forth the atomic Materialism as it appeared acceptable to the Roman mind and adapted to meet the needs of the Roman character for a philosophy of life and rule of duty. Just so it was the mission of Seneca to expound Pantheism to his countrymen; and in the almost religious fervor of his utterances about virtue and right living there is manifested the same spirit that stirred our poet.

The influence of Lucretius' poem as a philosophic work cannot be easily traced or readily estimated. The Latin writers of

[1] Whewell, 'Hist. of the Inductive Sciences,' Bk. 12, ch. 5.

his own and the following generation borrowed from it freely both ideas and expressions, but seem rarely to have made mention of the author.[1] Lucretius is several times noticed in the writings of the Silver Age, but principally in regard to his style.[2] Seneca, however, quotes him not infrequently, sometimes with approval, more often with refutation.[3] In the occasional citations of the poem by the later grammarians and men of letters, no reference is made to its doctrines.[4] The Latin writers of the early Church looked upon Lucretius as a deadly foe, and seem to have found his influence hurtful. They frequently assail the Epicurean philosophy, and sometimes attack him by name.[5] Several of them, however, were not above imitating his style, and occasionally they made free use of portions of his work not inconsistent with their creed.[6]

With the complete victory of the Christian doctrine over the Pagan philosophies and Gnostic tendencies, Lucretius and his system were lost sight of. But soon after the revival of letters he came into prominence as a popularizer of Epicureanism. The first striking illustration of his influence is met with in the half-poetic physical philosophy of Giordano Bruno, who combined his doctrine of the infinity of the universe and numberless worlds with the Copernican system, thus rendering great service to physical speculation and forming a theory which, "as against the old assumption of limited space, is of almost as much im-

[1] See n. to 5, 400; Nep. 'Vit. Att.' 12, 4; Pater. 'Hist. Rom.' 2, 36: Vitr. 'De Arch.' 9, 3; Ov. 'Trist.' 2, 425; Prop. 'El.' 2, 25, 29.

[2] Cf. Tac. 'De Or.' 23; Quin. 'Inst. Or.' 1, 4 and 10, 1; Stat. 'Sil.' 2, 7, 76.

[3] See 'De Tran. An.' 2; 'Ep.' 95 and 110, etc.

[4] E.g. Macr. 'Sat.', *passim*.

[5] Cf. Clem. 'Recog.' 17-19; Tertul. 'De An.' 5; Lact. 'Div. Inst.' 7, 3, etc.; Aug. 'De Util. Cred.' 4, 10; St. Hieron. 'Ep.' 132, and 'Contra Ruf.' 3, 29; etc.

[6] Arn. 'Adv. Gent.' is full of imitations; there are many in Drac. 'Carm. de Deo' and Prud. 'Contr. Sym.'; cf. also § 142 of the Proleg. to the latter in Migne's Patrology. Bede drew from Lucr. in his 'De Nat. Rerum;' cf. e.g. cap. 28 with Lucr. 6, 96–131; 37 with 1090–1113. Cf. also Isid. Hisp. Epis. 'Etymol.' 8, 3, 6–7.

portance as the doctrine of the revolution of the earth." Bruno quoted Lucretius frequently, and took his work as model in a didactic poem 'On the Universe and the Worlds.'[1]

Bacon went back to Democritus' conception of the atom, reckoning the atom-swerving introduced by Epicurus as 'a very simple device,'[2] and hardly refers to Lucretius' work; but Gassendi, a little later, revived Epicureanism as a whole, and made much use of it.[3] From the beginning of the seventeenth century Lucretius has received increasing recognition. Men of letters, like Montaigne and the quaint Burton, the English deists, Jeremy Taylor, Archbishop Ussher, and other learned divines, and writers on philosophy, politics, science, and religion, ever since the time of Gassendi, have found in the *De Rerum Natura* much that was suggestive, much that could be used to illustrate and enforce what they wished to express. Once at least the work drew forth a most elaborate and learned refutation, the 'Anti-Lucretius'[4] of Cardinal Polignac; and several have critically taken up different portions of the argument.[5] The influence of Lucretius has never been greater than in France during the latter part of the last century. The sceptical unrest of the age found in him a congenial spirit; and the French rationalistic works that then appeared are full of imitations, paraphrases, translated passages, and quotations from his poem.[6] To-day, with the revival of Materialism, the rapid advances in physical science, and the tendency, so characteristic of our age, to study every conception through its history, Lucretius is receiving marked attention on every hand. Taking the range

[1] 'De Universo et Mundis.' See Lange, 'Hist. of Materialism,' i. 232; Ueberweg, 'Hist. of Phil.,' ii. 26-7; Bartholmèss, 'Jordano Bruno,' i. 237, etc.

[2] 'Med. Sac.,' *De Haeresibus*.

[3] See especially Gassendi's 'Philosophiae Epicuri Syntagma,' 'De Vita et Moribus Epicuri,' and 'In Lib. x Diogenis Laërtii Animadversationes.'

[4] In nine books of Latin hexameters, published in 1748. The first five books were translated into English verse by George Canning and published at London in 1767. Cf. also Patry, 'L'Anti-Lucrèce du Cardinal Polignac;' Patin, 'Études sur la Poésie Latine,' vol. i. chap. 7.

[5] Cf. James Baxter, 'An Inquiry into the nature of the Human Soul;' Bayle, 'Dictionnaire,' art. *Lucrèce*.

[6] As the 'Système de la Nature,' the works of De la Mettrie, etc.

of literary and scientific works together, we shall find that few ancient writers are so frequently quoted or so often appealed to as he.[1]

2. Atomism, Ancient and Modern.

The Atomic theory of the constitution of matter has a history full of interest and importance. It formed the groundwork of a Hindu system of philosophy. Introduced into Greek thought by Leucippus and developed by Democritus, it was made by the Epicureans the physical basis of an ethics of pleasure. Bacon brought it into modern science, and Boyle applied it to Chemistry;[2] while Gassendi attracted attention to its relation to the problem of the universe. To-day the atomic theory of matter is the dominant one among both scientific investigators and philosophers, accepted often as unquestionable truth alike by chemists and physicists, atheists and divines. It still remains, as in the time of Democritus, an unverified hypothesis. But while it is no longer wedded to any one theory of the universe, it is often without good reason distinctively associated with the doctrines of materialistic evolution. In tracing the history of atomism, the two most important things to be considered are, the nature of the atom, and the means by which the relations of atoms with one another are thought to be adjusted.

The early Greek atomists conceived of the atoms as perfectly hard and eternally existent, with a tendency to move downward because of inherent weight, the heavier going faster than the lighter. For a causal principle they adopted the law of necessity (doubtless taken from the old religion); and for a principle

[1] Cf. e.g. Tyndall, 'The Belfast Address'; Tait and Stewart, 'The Unseen Universe'; and Flint, 'Anti-Theistic Theories.' See also Veitch, 'Lucretius and the Atomic Theory'; Masson, 'The Atomic Theory of Lucretius contrasted with Modern Doctrines of Atoms and Evolution'; Royer, 'Essai sur les arguments du matérialisme dans Lucrèce.'

[2] See Lange, 'Hist. of Materialism,' vol. i. This author's statements, however, should be accepted with caution. Dalton is the first who gave the doctrine of the atom a scientific treatment through chemical experiment.

of combination they assumed manifold shapes of atoms, by means of which these could become entangled and united in all kinds of things. The Epicureans rejected the law of necessity and all final cause, supposed that atoms move downward in empty space at the same rate, and assigned the occasion of atoms combining to the self-movement of some from their course. In this, without knowing it, they were really attributing psychic properties to the atom, and showed the influence of the old hylozoistic conception of matter. Although they utilized this voluntary power of the atom only in explaining the freedom of the will, believing that everything in nature goes on rigidly in obedience to law, the principle thus introduced was not lost sight of, but was carried to its fullest application in the gradual spiritualization of the atom. It was enlarged upon by Bruno, in the doctrine that "the elementary parts of all that exists are the minima or monads, which are to be considered as points, not absolutely unextended, but spherical; they are at once psychical and material." It permeates the system of Gassendi, who, though he claimed simply to revive Epicureanism, "ascribed to the atoms force and even sensation."[1] It found a complete and final realization in the monadology of Leibnitz. For in opposition to Spinoza's doctrine of one universal substance with the attributes of thought and extension, Leibnitz assumed a plurality of elementary forms, which he made out to be indivisible points or particles, "punctual unities," qualitatively different, each having a soul of its own and bearing to the sum of all a fixed relation in a system of universal harmony. As he emphasized the spiritual side of these psychic atoms or monads, his tendency was idealistic; and his doctrine marks a transition from Materialism to Idealism. Bruno, Gassendi, and Leibnitz accepted the Christian conception of God, but seem to have found it a difficult matter to reconcile this with their philosophy.

Bacon, as it has already been remarked, adopted Democritus' conception of the atom, which was accepted also by Newton.

[1] Ueberweg, 'Hist. of Phil.' ii. 14; but see Lange, i. 266.



Even Boyle thought that the atoms cohere by reason of their jagged shapes. The three agreed, however, in looking to the power of God as final cause in the building up of things out of atoms. With the discovery of the law of gravitation the course of physical speculation was changed. Gradually the doctrine of attraction and repulsion, the conception of forces acting immediately in the relations of atoms one with another, was introduced. The new principle seemed so potent and wide-reaching in its application, that an all-moving spirit hardly seemed necessary in accounting for the on-going of the universe. A tendency to the mechanical explanation of nature became manifest. In accordance with the spirit of this, Locke formulated his doctrine of sensationalism, which so harmonized with the trend of the times that it was most widely adopted as embodying the true theory of knowledge. The unfolding and application of its doctrines revolutionized European speculation, leading directly to the French "Illumination," with the rise of a materialistic theory of the universe and a utilitarian theory of morals. At present, the mechanical explanation of nature under the form of the evolution hypothesis is again struggling for the mastery.

The atom of modern science is the atom of Lucretius without the power of swerving. But Lucretius had no proper conception of force. Here at once his physical theory breaks down. For the doctrine of attraction he had only the poor substitute of varied shapes of atoms to keep them in combination. Repulsion, indeed, he foreshadowed in the importance he attached to the rebounding of atoms and masses after impact: but without the assumption of force this rebounding is inconceivable, because the atoms are considered absolutely hard, and hence must be inelastic. For the inherent downward tendency of atoms, modern science substitutes vibratory motion; it agrees with Lucretius in supposing the movements of atoms to be inconceivably swift. It agrees with him also in believing that all the processes of nature take place in accordance with certain laws of universal sway and invariable action. For a final cause the theistic physicist looks to an all-intelligent, all-potent God, who gave to atoms



their form, to force its impulse of movement; who impressed upon both matter and force a natural law, in accordance with which the universe has been built up and is carried on, in the out-working of a comprehensive divine plan. But the atheistic and agnostic thinkers, with the same inconsistency that characterized Lucretius, starting with chance and without a lawgiver, assume the reign of law, and suppose that with this atoms and space and force and time are adequate to account for all the facts and phenomena of the present order of things. The doctrine of the atom is just as consistent with a theistic as with an atheistic theory of the universe. Lucretius indeed personified, deified nature. In this he is followed by some modern materialists, while others seem to put evolution in the place of God, and deify a process.[1] In assuming the eternity of matter and the continuity of motion, the infinity of time and space, and numberless atoms, as essential conditions to the coming of a world into existence, Lucretius and the modern materialist are at one.

Regarding the genesis of things, Lucretius foreshadows modern science in the nebular hypothesis. In his account of the beginning of the world, as in the modern doctrine, we have the chaotic mingling of clashing and discordant elements; the formation of a world-nucleus; the gradual differentiation of parts composed of matter in states of unequal density. Here, however, the parallel ends. For the poet was giving range to his imagination in a magnificent conception, adapted to his philosophy from the old mythology, while the nebular hypothesis is based upon a careful examination of the properties and relations of the so-called elementary substances, framed in accordance with the laws of force, and through experiment receives at least a partial verification by analogy. In his ideas about the heavenly bodies and his explanations of natural phenomena, moreover, Lucretius is almost everywhere adrift.[2] With a keen interest in what is now termed science, but with no true scientific method,

[1] Cf. n. to 1, 21 and 56.

[2] Cf. n. to 1, 1058, etc.

in a tone of perfect assurance he gives expression to mere guesses, mentioning several possible causes of anything whenever he can. His principal concern is always to show how matters move on without divine power. Yet in several instances he hits upon theories that are generally thought to be distinctively modern.

Life, ancient atomism taught, originated of itself from certain combinations of atoms. In regard to this, again, modern atomists are divided. The theistic believe that above and behind the chemical equilibrium of the organism there is an elusive something which presides over it, which can have an origin in no possible combination of matter acted upon by force alone, which can come only from some higher power. But the materialists hold, with Lucretius, that life is spontaneously produced in matter under certain conditions. There is, however, this difference. Lucretius assumed that all the present types of living things, with many others that have died out, came into being and sprang directly from crass matter when the earth was new, and have not changed. He believed in the simultaneous origin and invariability of species. Scientific investigation now points to a common physical basis of life in protoplasm. The advocates of evolution, observing in the scale of being a gradual ascent from the lowest to the highest forms, hold that the lowest came into existence first; and that the higher have been developed from the lower by gradual and progressive differentiation, either in unbroken succession from the simplest organic existence up to man, or with special creations at certain points. The theistic evolutionist finds the origin of protoplasm in the creative act of God, and sees in the development of forms, either with or without special creations at certain points, the unfolding of a divine plan: the atheistic and the agnostic eliminate from the process everything except matter, force, and time; make protoplasm a spontaneous product, and the ascending scale of being an undirected accident within the limitation of certain natural laws, the existence and operation of which are not accounted for. Lucretius makes no attempt to bridge over the

chasm between dead matter and the highest organic existences. With his mind full of the popular hylozoistic conceptions of his time, the step from matter to life seemed to him natural and easy. Modern Materialism sees the difficulty, and obscures but does not remove it, by taking refuge in a slow process of development. Indeed, it makes several unwarrantable assumptions where Lucretius made one. The spontaneous origin of life is yet unproved, with the probabilities against it from the failure of repeated experiments to produce protoplasm. There are barriers between types that have not been broken down, and that are directly opposed to the present laws of reproduction. The correlation of physical and vital forces is as unproved to-day as in the time of Lucretius. Assuming the doctrine of descent to be true, the adaptation and harmony that run all through it profoundly emphasize the conception of design in it. For that cannot be taken out of matter which was not previously wrapt up in it; and unless an intelligent, directing Power be assumed behind matter this orderly unfolding is absolutely unaccountable. The chances are infinitely against it. The general similarity of types throughout the organic world points not so much to a likeness that might have been impressed upon all living things by being left as the wrack of countless ages of existence beating against the merciless rock-barriers of its environment, as to a profound "economy of plan," in accordance with which an infinite Wisdom shaped the forms of life, like the crystals, so that they stand to one another in a relation of marvellous harmony and beauty.

While the Materialism of our day is an outgrowth, in part, of the predominant interest now given to the natural sciences, both from the enthusiasm of rapid advances in investigation and from their wide-reaching practical applications, and in part, of the industrial and material trend of our civilization, the aim it professes is not so much to aid the scientist as to furnish a rule of duty. The foremost materialists have the same contempt for religion that Lucretius had, though they are not so vehement in their expression; and their philosophic purpose.

like his, is largely ethical.[1] Their psychology agrees with his, at least negatively, in denying the intuitions. Their theory of the supreme good is at bottom the same, though arrived at in a somewhat different way. The view of man's development in civilization and the origin of institutions set forth by Lucretius anticipated important modern theories, which are by no means confined to the doctrines of materialists, but which, in part at least, have been confirmed by the late investigations of archaeologists, and are generally accepted.[2]

All that is most valuable and suggestive in Lucretius' doctrine of the atom has its counterpart in modern science; and the atomic Materialism of the day, stripped of what belongs not alone to it but to science in general, to theistic as well as to atheistic and agnostic theories of the universe, is precisely Lucretius' doctrine of the nature of things, less the blunders in fact and method unavoidable in the state of knowledge of his time. Great as is the scientific value of the doctrine of evolution as a working hypothesis in investigation, as a convenient system of classification for related facts of the organic world, when applied to the explanation of the universe with no God it breaks down utterly. The materialistic evolution of our time, then, is simply the Materialism of Lucretius, wrought over in accordance with the scientific methods and adapted to the scientific knowledge of our day. Subjected to the scrutiny of careful criticism, it is found to be not a whit nearer to a settlement of the fundamental questions of existence than the system of the Roman poet.

[1] Cf. e. g. the preface to Spencer's 'Data of Ethics.'

[2] A detailed presentation of Lucretius' theory of morals and the social compact as compared with modern theories, would extend this Introduction beyond its proper limits. Cf. nn. to 1, 150; 1, 443; 1, 823; 1, 958; 1, 996; 1, 1021; 3, 161; 3, 713; 5, 429; 5, 826; 5, 925; 5, 1028; 5, 1145; 5, 1161.

III. LUCRETIUS AS A POET.

i. Literary Characteristics of the De Rerum Natura.

Before attempting to form an estimate of Lucretius' poetic power it is necessary to inquire, first, whether the poem stands to-day as it was left by him; and, secondly, whether it passed from the author's hands as a finished work.

It is well established that all the existing manuscripts of the poem come from one original manuscript, known as the archetype. This was lost long ago. From the fact that all copies are to be traced to one exemplar, it is obvious that wherever that was incorrect the error has been perpetuated, and is not to be remedied by comparison with other manuscripts. Thus it happens that in all the texts there are certain breaks and corrupt passages, which have taxed the utmost ingenuity of commentators, without any certainty in the end of presenting what the poet wrote. Lucretius, moreover, was one whose views the monastery copyists would not be apt to approve of. For this reason, there have crept in many interpolations and transpositions of passages intended either to refute the argument or show the poet's inconsistency by quoting him against himself. These errors, as well as the unavoidable blunders that abound in manuscripts, have been mostly corrected by the able critical scholars who have given their attention to the text, and now "the great mass of the poem" is "in a sound and satisfactory state;" but in some places the thought of the poet cannot be determined.

As before remarked, there is evidence to prove that at the poet's death his work had not yet received the finishing touches. In the last three books especially there are awkward sentences, ill-arranged passages, and weak repetitions; occasionally whole paragraphs are met with that ill suit the connection and are

clearly out of place, probably inserted by the poet as a make-shift till some better setting could be found for them. The allusion to Cicero's editorship in the passage from Jerome quoted above has given rise to much discussion; some, as Lachmann, think that Quintus Cicero is referred to, while Munro and others suppose that the orator is meant. Of course Jerome had the orator in mind, for in his day as now, when Cicero was spoken of, men thought of the great Cicero. Although there is some reason for supposing that Quintus acted as editor of the poem, it is far more likely that the task fell upon Marcus, who "may have spent only a few hours in looking over it or hearing it read to him; his name rather than his time was probably wanted by the friends of Lucretius." At any rate the poem seems to have been "given to the world exactly as it was left by the author, with nothing added or taken from it to all appearance." Thus says the highest critical authority upon the text, and his statement may be sustained by many evidences which it is not necessary to present. Suffice it to say that notwithstanding the uncompleted state of the poem, and the hopeless corruptions and lacunæ, there is manifest a literary ability unexcelled by that of any Latin writer. In the unfolding and treatment of the organic idea, as well as in the manner of expression and the music of the verse, poetic genius of a high order is revealed.

The *De Rerum Natura* is a didactic poem with an ethical purpose. The organic idea is, — without the activity or intervention of any divine power the processes of nature and of life ever go on. The purpose is, — to free men from the ills of superstition. Herein is sounded the key-note of the whole. The aim and the organic idea are never lost sight of. Hence the poem possesses unity; the parts all fit into a general plan. There is something like an epic movement, which does not come from the verse alone, but from the onward sweep of thought. Especially in certain passages about life and death and the actions of men, and in some descriptions of changes, the true epic spirit is felt.

Any system of philosophy is difficult to treat in verse; it involves necessarily the bringing in of many prosaic elements. Whether a materialistic theory of the universe in this respect is worse off than others it is not easy to decide. A theistic or pantheistic system has at least one advantage, — that by appealing directly to a divine intelligence and power it may save itself much technical and tedious explanation in searching out the long train of natural causes, while by dwelling upon a supernatural element in life and law it tends to ennoble virtue and give to human character a higher dignity. Epicureanism, in its grasp on the infinity of space and time and number of worlds, with the clashing of atoms in the void; in its recognition of the tremendous forces operating undirected in the processes of nature; and even in its bold denial of the divine and its fierce arraignment of religion, was not lacking in elements of sublimity; while from its sympathy with nature it came close to the springs of beauty. Yet the numberless dry details which characterized all previous expositions of the doctrine were such as well-nigh to defy poetic treatment. In his selection of materials and his grasp of the organic idea the artistic power of the poet is well shown.

In his unfolding of the organic idea Lucretius takes up first, in book I., the fundamental doctrines of his system; then in book II., the special treatment of the atom. Book III is given to a discussion of the soul, with special reference to its mortality; book IV., to the explanation of the phenomena of sensation. In book V. the poet sets forth the formation of the world, with the beginnings of organic life; and traces the development of man in civilization. Book VI. is devoted to the explanation of the most striking natural phenomena. In the logical order of exposition the fifth and sixth books would naturally follow the second. But so eager was the poet to dispel the fears inspired by the thought of death, that before completing his theory of the universe he hastened to give his doctrine of the soul and sense-perception, in order to disprove the soul's immortality. In this arrangement there is consummate skill. It is a

recognition of the same principle that leads the epic poets to rush *in medias res*, leaving the less important or preceding matters to be presented later by narration. The details, like the general plan, are frequently arranged by the poet with the same sense of poetic fitness. The points that go to establish an argument are artistically put in array. While the form of statement is so varied as not to give the impression of a logical series, they ascend with cumulative force, often coming to an end with a sharp appeal to common sense or an ironical illustration to silence the unconvinced. At times, however, cold logic dominates, and the poet sinks almost to the level of prose.

Lucretius' manner of expression is plain, direct, and forcible. The poets in whom he seems most to have delighted were Homer, Euripides, Empedocles (styled Homeric by Aristotle) and Ennius. He had also read much Cicero's 'Aratea,'—a work in places exceedingly spirited and apt in expression. But while Lucretius occasionally shows the influence of other writers, his style has a marked individuality. There is little of the 'highest art that conceals art;' there is rather the vigor of native genius that cared nothing for beauty of expression for its own sake, but merely sought for a form of language that could in some degree convey the vividness of conception. Hence he did not hesitate to coin new words; and some of the compounds he formed are of rare expressiveness. Poetic pleonasms, by which he gave prominence to a conception in holding it before the thought, are common enough; but while his range of epithets is large, he never lavishes them needlessly. Technical terms, considering the character of his subject, are few; and owing to the almost epic simplicity and directness of statement, the most subtle arguments are set forth with clearness and accuracy of expression. Yet little obscurities, which sometimes arise from the use of the same word in different senses and from the form of the construction, he passes over without heed. The epic tone of the poem is heightened by the not infrequent use of archaisms.

In his collocation of words Lucretius sometimes shows a striving after effect. The fondness for alliteration and assonance, so common among the early Latin writers, is displayed in no small degree. Yet the ear does not sate with the results of it; often his arrangements of words, especially in the adaptation of verse-movement to sense, are peculiar and highly effective. The versification of Lucretius is a vast improvement upon that of Ennius in regularity and ease of movement. There is a tendency toward the monotonous; but it is always a monotony suggestive rather of majestic flow than insipid rippling. Its rhythm is on the whole more pleasant to the ear than that of Horace's hexameters, though it lacks the subtle variety and artistic finish of Vergil's. As a philosopher Lucretius was surpassed by no Roman in the power of grasping a system of thought, or in cogency of reasoning; as a poet he was unequalled by any Roman in originality and power of expression. The *De Rerum Natura* is by many regarded, not unjustly, as the greatest didactic poem of all literature.

ii. Analysis of the De Rerum Natura.

Book I.

Introductory:

- Invocation to Venus 1–43
- Unfolding of the purpose and the subject of the poem 50–145

i. Fundamental Principles:

1. From nothing nothing is produced 146–214
2. To nothing nought returns 215–264

ii. Elemental parts of the universe, Matter and Void:

1. Matter exists, composed of minute particles, the atoms 265–328
2. There is void, in which atoms move and are acted on 329–417
3. Matter and void alone make up the universe . 418–482

BOOK II.

[1] See note to I, 921.

BOOK III.

[1] Twenty-seven in number; see notes p. 311, *et seq.*

[2] 1–25 are repeated almost word for word from 1, 921–946.

[1] See p. 338. [2] Seven reasons are given; see pp. 340–350.

BOOK VI.

T. LUCRETI CARI

DE RERUM NATURA

LIBER PRIMUS.

Aeneadum genetrix, hominum divomque voluptas,
alma Venus, caeli subter labentia signa
quae mare navigerum, quae terras frugiferentis
concelebras, per te quoniam genus omne animantum
concipitur visitque exortum lumina solis: 5
te, dea, te fugiunt venti, te nubila caeli
adventumque tuum, tibi suavis daedala tellus
summittit flores, tibi rident aequora ponti
placatumque nitet diffuso lumine caelum.
nam simul ac species patefactast verna diei 10
et reserata viget genitabilis aura favoni,
aëriae primum volucres te, diva, tuumque
significant initum perculsae corda tua vi.
inde ferae pecudes persultant pabula laeta
et rapidos tranant amnis: ita capta lepore 15
te sequitur cupide quo quamque inducere pergis.
denique per maria ac montis fluviosque rapacis
frondiferasque domos avium camposque virentis
omnibus incutiens blandum per pectora amorem
efficis ut cupide generatim saecla propagent. 20
quae quoniam rerum naturam sola gubernas
nec sine te quicquam dias in luminis oras
exoritur neque fit laetum neque amabile quicquam,

te sociam studeo scribendis versibus esse
quos ego de rerum natura pangere conor 25
Memmiadae nostro, quem tu, dea, tempore in omni
omnibus ornatum voluisti excellere rebus.
quo magis aeternum da dictis, diva, leporem.
effice ut interea fera moenera militiai
per maria ac terras omnis sopita quiescant. 30
nam tu sola potes tranquilla pace iuvare
mortalis, quoniam belli fera moenera Mavors
armipotens regit, in gremium qui saepe tuum se
reicit aeterno devictus vulnere amoris,
atque ita suspiciens tereti cervice reposta 35
pascit amore avidos inhians in te, dea, visus,
eque tuo pendet resupini spiritus ore.
hunc tu, diva, tuo recubantem corpore sancto
circumfusa super, suavis ex ore loquellas
funde petens placidam Romanis, incluta, pacem. 40
nam neque nos agere hoc patriai tempore iniquo
possumus aequo animo nec Memmi clara propago
talibus in rebus communi desse saluti.

*

quod superest, vacuas auris animumque sagacem 50
semotum a curis adhibe vêram ad rationem,
ne mea dona tibi studio disposta fideli,
intellecta prius quam sint, contempta relinquas.
nam tibi de summa caeli ratione deumque
disserere incipiam et rerum primordia pandam, 55
unde omnis natura creet res auctet alatque
quove eadem rursum natura perempta resolvat,
quae nos materiem et genitalia corpora rebus
reddunda in ratione vocare et semina rerum
appellare suëmus et haec eadem usurpare 60
corpora prima, quod ex illis sunt omnia primis.

Humana ante oculos foede cum vita iaceret
in terris oppressa gravi sub religione

quae caput a caeli regionibus ostendebat
horribili super aspectu mortalibus instans, 65
primum Graius homo mortalis tollere contra
est oculos ausus primusque obsistere contra,
quem neque fama deum nec fulmina nec minitanti
murmure compressit caelum, sed eo magis acrem
inritāt animi virtutem, effringere ut arta 70
naturae primus portarum claustra cupiret.
ergo vivida vis animi pervicit, et extra
processit longe flammantia moenia mundi
atque omne immensum peragravit mente animoque,
unde refert nobis victor quid possit oriri, 75
quid nequeat, finita potestas denique cuique
quanam sit ratione atque alte terminus haerens.
quare religio pedibus subiecta vicissim
opteritur, nos exaequat victoria caelo.
Illud in his rebus vereor, ne forte rearis 80
inpia te rationis inire elementa viamque
indugredi sceleris. quod contra saepius illa
religio peperit scelerosa atque impia facta.
Aulide quo pacto Triviai virginis aram
Iphianassai turparunt sanguine foede 85
ductores Danaum delecti, prima virorum.
cui simul infula virgineos circumdata comptus
ex utraque pari malarum parte profusast,
et maestum simul ante aras adstare parentem
sensit et hunc propter ferrum celare ministros 90
aspectuque suo lacrimas effundere civis,
muta metu terram genibus summissa petebat.
nec miserae prodesse in tali tempore quibat
quod patrio princeps donarat nomine regem;
nam sublata virum manibus tremibundaque ad aras 95
deductast, non ut sollemni more sacrorum
perfecto posset claro comitari Hymenaeo,
sed casta inceste nubendi tempore in ipso

hostia conciderct mactatu maesta parentis,
exitus ut classi felix faustusque daretur. 100
tantum religio potuit suadere malorum.
Tutemet a nobis iam quovis tempore vatum
terriloquis victus dictis desciscere quaeres.
quippe etenim quam multa tibi iam fingere possunt
somnia quae vitae rationes vertere possint 105
fortunasque tuas omnis turbare timore!
et merito; nam si certam finem esse viderent
aerumnarum homines, aliqua ratione valerent
religionibus atque minis obsistere vatum.
nunc ratio nulla est restandi, nulla facultas, 110
aeternas quoniam poenas in morte timendumst.
ignoratur enim quae sit natura animai,
nata sit an contra nascentibus insinuetur,
et simul intereat nobiscum morte dirempta
an tenebras Orci visat vastasque lacunas 115
an pecudes alias divinitus insinuet se,
Ennius ut noster cecinit qui primus amoeno
detulit ex Helicone perenni fronde coronam,
per gentis Italas hominum quae clara clueret;
etsi praeterea tamen esse Acherusia templa 120
Ennius aeternis exponit versibus edens,
quo neque permaneant animae neque corpora nostra,
sed quaedam simulacra modis pallentia miris;
unde sibi exortam semper florentis Homeri
commemorat speciem lacrimas effundere salsas 125
coepisse et rerum naturam expandere dictis.
quapropter bene cum superis de rebus habenda
nobis est ratio, solis lunaeque meatus
qua fiant ratione, et qua vi quaeque gerantur
in terris, tum cum primis ratione sagaci 130
unde anima atque animi constet natura videndum;
et quae res nobis, vigilantibus obvia, mentes
terrificet morbo adfectis somnoque sepultis,

cernere uti videamur eos audireque coram,
morte obita quorum tellus amplectitur ossa. 135
nec me animi fallit Graiorum obscura reperta
difficile inlustrare Latinis versibus esse,
multa novis verbis praesertim cum sit agendum
propter egestatem linguae et rerum novitatem;
sed tua me virtus tamen et sperata voluptas 140
suavis amicitiae quemvis sufferre laborem
suadet et inducit noctes vigilare serenas
quaerentem dictis quibus et quo carmine demum
clara tuae possim praepandere lumina menti,
res quibus occultas penitus convisere possis. 145
Hunc igitur terrorem animi tenebrasque necessest
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.
principium cuius hinc nobis exordia sumet,
nullam rem e nilo gigni divinitus umquam. 150
quippe ita formido mortalis continet omnis,
quod multa in terris fieri caeloque tuentur
quorum operum causas nulla ratione videre
possunt ac fieri divino numine rentur.
quas ob res ubi viderimus nil posse creari 155
de nilo, tum quod sequimur iam rectius inde
perspiciemus, et unde queat res quaeque creari
et quo quaeque modo fiant opera sine divom.
Nam si de nilo fierent, ex omnibu' rebus
omne genus nasci posset, nil semine egeret. 160
e mare primum homines, e terra posset oriri
squamigerum genus et volucres erumpere caelo;
armenta atque aliae pecudes, genus omne ferarum,
incerto partu culta ac deserta tenerent.
nec fructus idem arboribus constare solerent, 165
sed mutarentur, ferre omnes omnia possent.
quippe ubi non essent genitalia corpora cuique,
qui posset mater rebus consistere certa?

at nunc seminibus quia certis quaeque creantur,
inde enascitur atque oras in luminis exit, 170
materies ubi inest cuiusque et corpora prima;
atque hac re nequeunt ex omnibus omnia gigni,
quod certis in rebus inest secreta facultas.
praeterea cur vere rosam, frumenta calore,
vites autumno fundi suadente videmus, 175
si non, certa suo quia tempore semina rerum
cum confluxerunt, patefit quodcumque creatur,
dum tempestates adsunt et vivida tellus
tuto res teneras effert in luminis oras?
quod si de nilo fierent, subito exorerentur 180
incerto spatio atque alienis partibus anni,
quippe ubi nulla forent primordia quae genitali
concilio possent arceri tempore iniquo.
nec porro augendis rebus spatio foret usus
seminis ad coitum, si e nilo crescere possent; 185
nam fierent iuvenes subito ex infantibu' parvis
e terraque exorta repente arbusta salirent.
quorum nil fieri manifestum est, omnia quando
paulatim crescunt, ut par est, semine certo
crescentesque genus servant; ut noscere possis 190
quicque sua de materia grandescere alique.
huc accedit uti sine certis imbribus anni
laetificos nequeat fetus submittere tellus
nec porro secreta cibo natura animantum
propagare genus possit vitamque tueri; 195
ut potius multis communia corpora rebus
multa putes esse, ut verbis elementa videmus,
quam sine principiis ullam rem existere posse.
denique cur homines tantos natura parare
non potuit, pedibus qui pontum per vada possent 200
transire et magnos manibus divellere montis
multaque vivendo vitalia vincere saecla,
si non, materies quia rebus reddita certast

gignundis e qua constat quid posset oriri?
nil igitur fieri de nilo posse fatendumst, 205
semine quando opus est rebus quo quaeque creatae
aëris in teneras possint proferrier auras.
postremo quoniam incultis praestare videmus
culta loca et manibus melioris reddere fetus,
esse videlicet in terris primordia rerum 210
quae nos fecundas vertentes vomere glebas
terraique solum subigentes cimus ad ortus.
quod si nulla forent, nostro sine quaeque labore
sponte sua multo fieri meliora videres.

Huc accedit uti quicque in sua corpora rursum 215
dissoluat natura neque ad nilum interemat res.
nam siquid mortale e cunctis partibus esset,
ex oculis res quaeque repente erepta periret.
nulla vi foret usus enim quae partibus eius
discidium parere et nexus exsolvere posset. 220
quod nunc, aeterno quia constant semine quaeque,
donec vis obiit quae res diverberet ictu
aut intus penetret per inania dissoluatque,
nullius exitium patitur natura videri.
praeterea quaecumque vetustate amovet aetas, 225
si penitus peremit consumens materiem omnem,
unde animale genus generatim in lumina vitae
redducit Venus, aut redductum daedala tellus
unde alit atque auget generatim pabula praebens?
unde mare ingenuei fontes externaque longe 230
flumina suppeditant? unde aether sidera pascit?
omnia enim debet, mortali corpore quae sunt,
infinita aetas consumpse anteacta diesque.
quod si in eo spatio atque anteacta aetate fuere
e quibus haec rerum consistit summa refecta, 235
inmortali sunt natura praedita certe,
haut igitur possunt ad nilum quaeque reverti.
denique res omnis eadem vis causaque volgo

conficeret, nisi materies aeterna teneret,
inter se nexu minus aut magis indupedita; 240
tactus enim leti satis esset causa profecto,
quippe, ubi nulla forent aeterno corpore, quorum
contextum vis deberet dissolvere quaeque.
at nunc, inter se quia nexus principiorum
dissimiles constant aeternaque materies est, 245
incolumi remanent res corpore, dum satis acris
vis obeat pro textura cuiusque reperta.
haud igitur redit ad nilum res ulla, sed omnes
discidio redeunt in corpora materiai.
postremo pereunt imbres, ubi eos pater aether 250
in gremium matris terrai praecipitavit;
at nitidae surgunt fruges ramique virescunt
arboribus, crescunt ipsae fetuque gravantur;
hinc alitur porro nostrum genus atque ferarum,
hinc laetas urbes pueris florere videmus 255
frondiferasque novis avibus canere undique silvas;
hinc fessae pecudes pingui per pabula laeta
corpora deponunt et candens lacteus umor
uberibus manat distentis; hinc nova proles
artubus infirmis teneras lasciva per herbas 260
ludit lacte mero mentes perculsa novellas.
haud igitur penitus pereunt quaecumque videntur,
quando alid ex alio reficit natura nec ullam
rem gigni patitur nisi morte adiuta aliena.

Nunc age, res quoniam docui non posse creari 265
de nilo neque item genitas ad nil revocari,
nequa forte tamen coeptes diffidere dictis,
quod nequeunt oculis rerum primordia cerni,
accipe praeterea quae corpora tute necessest
confiteare esse in rebus nec posse videri. 270
principio venti vis verberat incita portus
ingentisque ruit navis et nubila differt,
interdum rapido percurrens turbine campos

arboribus magnis sternit montisque supremos
silvifragis vexat flabris: ita perfurit acri 275
cum fremitu saevitque minaci murmure ventus.
sunt igitur venti nimirum corpora caeca
quae mare, quae terras, quae denique nubila caeli
verrunt ac subito vexantia turbine raptant,
nec ratione fluunt alia stragemque propagant 280
et cum mollis aquae fertur natura repente
flumine abundanti, quam largis imbribus auget
montibus ex altis magnus decursus aquai
fragmina coniciens silvarum arbustaque tota,
nec validi possunt pontes venientis aquai 285
vim subitam tolerare: ita magno turbidus imbri
molibus incurrit validis cum viribus amnis:
dat sonitu magno stragem volvitque sub undis
grandia saxa: ruit qua quicquid fluctibus obstat.
sic igitur debent venti quoque flamina ferri, 290
quae veluti validum cum flumen procubuere
quamlibet in partem, trudunt res ante ruuntque
impetibus crebris, interdum vertice torto
corripiunt rapideque rotanti turbine portant.
quare etiam atque etiam sunt venti corpora caeca, 295
quandoquidem factis et moribus aemula magnis
amnibus inveniuntur, aperto corpore qui sunt.
tum porro varios rerum sentimus odores
nec tamen ad naris venientis cernimus umquam,
nec calidos aestus tuimur nec frigora quimus 300
usurpare oculis nec voces cernere suemus;
quae tamen omnia corporea constare necessest
natura, quoniam sensus inpellere possunt.
tangere enim et tangi, nisi corpus, nulla potest res.
denique fluctifrago suspensae in litore vestes 305
uvescunt, eaedem dispansae in sole serescunt.
at neque quo pacto persederit umor aquai
visumst nec rursum quo pacto fugerit aestu.

in parvas igitur partis dispergitur umor
quas oculi nulla possunt ratione videre. 310
quin etiam multis solis redeuntibus annis
anulus in digito subter tenuatur habendo,
stilicidi casus lapidem cavat, uncus aratri
ferreus occulte decrescit vomer in arvis,
strataque iam volgi pedibus detrita viarum 315
saxea conspicimus; tum portas propter aëna
signa manus dextras ostendunt adtenuari
saepe salutantum tactu praeterque meantum.
haec igitur minui, cum sint detrita, videmus.
sed quae corpora decedant in tempore quoque, 320
invida praeclusit speciem natura videndi.
postremo quaecumque dies naturaque rebus
paulatim tribuit, moderatim crescere cogens,
nulla potest oculorum acies contenta tueri;
nec porro quaecumque aevo macieque senescunt, 325
nec, mare quaé inpendent, vesco sale saxa peresa
quid quoque amittant in tempore cernere possis.
corporibus caecis igitur natura gerit res.
Nec tamen undique corporea stipata tenentur
omnia natura; namque est in rebus inane. 330
quod tibi cognosse in multis erit utile rebus
nec sinet errantem dubitare et quaerere semper
de summa rerum et nostris diffidere dictis.
[quapropter locus est intactus inane vacansque.]
quod si non esset, nulla ratione moveri 335
res possent; namque officium quod corporis exstat,
officere atque obstare, id in omni tempore adesset
omnibus; haud igitur quicquam procedere posset,
principium quoniam cedendi nulla daret res.
at nunc per maria ac terras sublimaque caeli 340
multa modis multis varia ratione moveri
cernimus ante oculos, quae, si non esset inane,
non tam sollicito motu privata carerent

quam genita omnino nulla ratione fuissent,
undique materies quoniam stipata quiesset. 345
praeterea quamvis solidae res esse putentur,
hinc tamen esse licet raro cum corpore cernas.
in saxis ac speluncis permanat aquarum
liquidus umor et uberibus flent omnia guttis.
dissipat in corpus sese cibus omne animantum. 350
crescunt arbusta et fetus in tempore fundunt,
quod cibus in totas usque ab radicibus imis
per truncos ac per ramos diffunditur omnis.
inter saepta meant voces et clausa domorum
transvolitant, rigidum permanat frigus ad ossa, 355
quod nisi inania sint, qua possint corpora quaeque
transire? haud ulla fieri ratione videres.
denique cur alias aliis praestare videmus
pondere res rebus nilo maiore figura?
nam si tantundemst in lanae glomere quantum 360
corporis in plumbo est, tantundem pendere par est,
corporis officiumst quoniam premere omnia deorsum,
contra autem natura manet sine pondere inanis.
ergo quod magnumst aeque leviusque videtur,
nimirum plus esse sibi declarat inanis; 365
at contra gravius plus in se corporis esse
dedicat et multo vacui minus intus habere.
est igitur nimirum id quod ratione sagaci
quaerimus, admixtum rebus, quod inane vocamus.

Illud in his rebus ne te deducere vero 370
possit, quod quidam fingunt, praecurrere cogor.
cedere squamigeris latices nitentibus aiunt
et liquidas aperire vias, quia post loca pisces
linquant, quo possint cedentes confluere undae;
sic alias quoque res inter se posse moveri 375
et mutare locum, quamvis sint omnia plena.
scilicet id falsa totum ratione receptumst.
nam quo squamigeri poterunt procedere tandem,

ni spatium dederint latices? concedere porro
quo poterunt undae, cum pisces ire nequibunt? 380
aut igitur motu privandumst corpora quaeque
aut esse admixtum dicundumst rebus inane
unde initum primum capiat res quaeque movendi.
postremo duo de concursu corpora lata
si cita dissiliant, nempe aër omne necessest, 385
inter corpora quod fiat, possidat inane.
is porro quamvis circum celerantibus auris
confluat, haud poterit tamen uno tempore totum
compleri spatium; nam primum quemque necessest
occupet ille locum, deinde omnia possideantur. 390
quod si forte aliquis, cum corpora dissiluere,
tum putat id fieri quia se condenseat aër,
errat; nam vacuum tum fit quod non fuit ante
et repletur item vacuum quod constitit ante,
nec tali ratione potest denserier aër, 395
nec, si iam posset, sine inani posset, opinor,
ipse in se trahere et partis conducere in unum.

Quapropter, quamvis causando multa moreris,
esse in rebus inane tamen fateare necessest.
multaque praeterea tibi possum commemorando 400
argumenta fidem dictis conradere nostris.
verum animo satis haec vestigia parva sagaci
sunt per quae possis cognoscere cetera tute.
namque canes ut montivagae persaepe ferai
naribus inveniunt intectas fronde quietes, 405
cum semel instituerunt vestigia certa viai,
sic alid ex alio per te tute ipse videre
talibus in rebus poteris caecasque latebras
insinuare omnis et verum protrahere inde.
quod si pigraris paulumve recesseris ab re, 410
hoc tibi de plano possum promittere, Memmi:
usque adeo largos haustus e fontibu' magnis
lingua meo suavis diti de pectore fundet,

ut verear ne tarda prius per membra senectus
serpat et in nobis vitai claustra resolvat, 415
quam tibi de quavis una re versibus omnis
argumentorum sit copia missa per auris.

Sed nunc ut repetam coeptum pertexere dictis,
omnis, ut est, igitur per se natura duabus
constitit in rebus; nam corpora sunt et inane, 420
haec in quo sita sunt et qua diversa moventur.
corpus enim per se communis dedicat esse
sensus; cui nisi prima fides fundata valebit,
haut erit occultis de rebus quo referentes
confirmare animi quicquam ratione queamus. 425
tum porro locus ac spatium, quod inane vocamus,
si nullum foret, haut usquam sita corpora possent
esse neque omnino quoquam diversa meare;
id quod iam supera tibi paulo ostendimus ante.
praeterea nil est quod possis dicere ab omni 430
corpore seiunctum secretumque esse ab inani,
quod quasi tertia sit numero natura reperta.
nam quodcumque erit, esse aliquid debebit id ipsum;
cui si tactus erit quamvis levis exiguusque,
augmine vel grandi vel parvo denique, dum sit, 435
corporis augebit numerum summamque sequetur.
sin intactile erit, nulla de parte quod ullam
rem prohibere queat per se transire meantem,
scilicet hoc id erit, vacuum quod inane vocamus.
praeterea per se quodcumque erit, aut faciet quid 440
aut aliis fungi debebit agentibus ipsum
aut erit ut possint in eo res esse gerique.
ac facere et fungi sine corpore nulla potest res
nec praebere locum porro nisi inane vacansque.
ergo praeter inane et corpora tertia per se 445
nulla potest rerum in numero natura relinqui,
nec quae sub sensus cadat ullo tempore nostros
nec ratione animi quam quisquam possit apisci.

Nam quaecumque cluent, aut his coniuncta duabus
rebus ea invenies aut horum eventa videbis. 450
coniunctum est id quod nusquam sine permitiali
discidio potis est seiungi seque gregari,
pondus uti saxist, calor ignis, liquor aquai.
[tactus corporibus cunctis intactus inani.]
servitium contra paupertas divitiaeque, 455
libertas bellum concordia, cetera quorum
adventu manet incolumis natura abituque,
haec soliti sumus, ut par est, eventa vocare.
tempus item per se non est, sed rebus ab ipsis
consequitur sensus, transactum quid sit in aevo, 460
tum quae res instet, quid porro deinde sequatur.
nec per se quemquam tempus sentire fatendumst
semotum ab rerum motu placidaque quiete.
denique Tyndaridem raptam belloque subactas
Troiiugenas gentis cum dicunt esse, videndumst 465
ne forte haec per se cogant nos esse fateri,
quando ea saecla hominum, quorum haec eventa fuerunt,
inrevocabilis abstulerit iam praeterita aetas;
namque aliut Teucris, aliut regionibus ipsis
eventum dici poterit quodcumque erit actum. 470
denique materies si rerum nulla fuisset
nec locus ac spatium, res in quo quaeque geruntur,
numquam Tyndaridis formae conflatus amore
ignis, Alexandri Phrygio sub pectore gliscens,
clara accendisset saevi certamina belli, 475
nec clam durateus Troiianis Pergama partu
inflammasset equos nocturno Graiiugenarum;
perspicere ut possis res gestas funditus omnis
non ita uti corpus per se constare neque esse,
nec ratione cluere eadem qua constet inane, 480
sed magis ut merito possis eventa vocare
corporis atque loci, res in quo quaeque gerantur.

Corpora sunt porro partim primordia rerum,

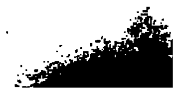


partim concilio quae constant principiorum.
sed quae sunt rerum primordia, nulla potest vis 485
stinguere; nam solido vincunt ea corpore demum.
etsi difficile esse videtur credere quicquam
in rebus solido reperiri corpore posse.
transit enim fulmen caeli per saepta domorum,
clamor ut ac voces; ferrum candescit in igni 490
dissiliuntque fero ferventia saxa vapore;
tum labefactatus rigor auri solvitur aestu;
tum glacies aeris flamma devicta liquescit;
permanat calor argentum penetraleque frigus,
quando utrumque manu retinentes pocula rite 495
sensimus infuso lympharum rore superne.
usque adeo in rebus solidi nil esse videtur.
sed quia vera tamen ratio naturaque rerum
cogit, ades, paucis dum versibus expediamus
esse ea quae solido atque aeterno corpore constent, 500
semina quae rerum primordiaque esse docemus,
unde omnis rerum nunc constet summa creata.

a Principio quoniam duplex natura duarum
dissimilis rerum longe constare repertast,
corporis atque loci, res in quo quaeque geruntur, 505
esse utramque sibi per se puramque necessest.
nam quacumque vacat spatium, quod inane vocamus,
corpus ea non est; qua porro cumque tenet se
corpus, ea vacuum nequaquam constat inane.
sunt igitur solida ac sine inani corpora prima. 510
b praeterea quoniam genitis in rebus inanest,
materiem circum solidam constare necessest,
nec res ulla potest vera ratione probari
corpore inane suo celare atque intus habere,
si non, quod cohibet, solidum constare relinquas. 515
c id porro nil esse potest nisi materiai
concilium, quod inane queat rerum cohibere.
materies igitur, solido quae corpore constat,



esse aeterna potest, cum cetera dissoluantur.
tum porro si nil esset quod inane vocaret, 520
omne foret solidum; nisi contra corpora certa
essent quae loca complerent quaecumque tenerent,
omne quod est, spatium vacuum constaret inane.
alternis igitur nimirum corpus inani
distinctumst, quoniam nec plenum naviter extat 525
nec porro vacuum. sunt ergo corpora certa
quae spatium pleno possint distinguere inane.
haec neque dissolui plagis extrinsecus icta
possunt nec porro penitus penetrata retexi
nec ratione queunt alia temptata labare; 530
id quod iam supra tibi paulo ostendimus ante.
nam neque conlidi sine inani posse videtur
quicquam nec frangi nec findi in bina secando
nec capere umorem neque item manabile frigus
nec penetralem ignem, quibus omnia conficiuntur. 535
et quo quaeque magis cohibet res intus inane,
tam magis his rebus penitus temptata labascit.
ergo si solida ac sine inani corpora prima
sunt ita uti docui, sint haec aeterna necessest.
praeterea nisi materies aeterna fuisset, 540
antehac ad nilum penitus res quaeque redissent
de niloque renata forent quaecumque videmus.
at quoniam supra docui nil posse creari
de nilo neque quod genitum est ad nil revocari,
esse inmortali primordia corpore debent, 545
dissolui quo quaeque supremo tempore possint,
materies ut subpeditet rebus reparandis.
sunt igitur solida primordia simplicitate
nec ratione queunt alia servata per aevom
ex infinito iam tempore res reparare. 550
Denique si nullam finem natura parasset
frangendis rebus, iam corpora materiai
usque redacta forent aevo frangente priore,



ut nil ex illis a certo tempore posset
conceptum summum aetatis pervadere ad auctum. 555
nam quidvis citius dissolvi posse videmus
quam rursus refici; quapropter longa diei
infinita aetas anteacti temporis omnis
quod fregisset adhuc disturbans dissoluensque,
numquam relicuo reparari tempore posset. 560
at nunc nimirum frangendi reddita finis
certa manet, quoniam refici rem quamque videmus
et finita simul generatim tempora rebus
stare, quibus possint aevi contingere florem.
huc accedit uti, solidissima materiai 565
corpora cum constant, possit tamen, omnia, reddi,
mollia quae fiunt, aër aqua terra vapores,
quo pacto fiant et qua vi quaeque gerantur,
admixtum quoniam semel est in rebus inane.
at contra si mollia sint primordia rerum, 570
unde queant validi silices ferrumque creari
non poterit ratio reddi; nam funditus omnis
principio fundamenti natura carebit.
sunt igitur solida pollentia simplicitate
quorum condenso magis omnia conciliatu 575
artari possunt validasque ostendere viris.
Porro si nullast frangendis reddita finis
corporibus, tamen ex aeterno tempore quaeque
nunc etiam superare necessest corpora rebus,
quae nondum clueant ullo temptata periclo. 580
at quoniam fragili natura praedita constant,
discrepat aeternum tempus potuisse manere
innumerabilibus plagis vexata per aevom.
denique iam quoniam generatim reddita finis
crescendi rebus constat vitamque tenendi, 585
et quid quaeque queant per foedera naturai,
quid porro nequeant, sancitum quandoquidem extat,
nec commutatur quicquam, quin omnia constant

usque adeo, variae volucres ut in ordine cunctae
ostendant maculas generalis corpore inesse, 590
inmutabili' materiae quoque corpus habere
debent nimirum. nam si primordia rerum
commutari aliqua possint ratione revicta,
incertum quoque iam constet quid possit oriri,
quid nequeat, finita potestas denique cuique 595
quanam sit ratione atque alte terminus haerens,
nec totiens possint generatim saecla referre
naturam mores victum motusque parentum.

Tum porro quoniam est extremum quodque cacumen
corporis illius quod nostri cernere sensus 600
iam nequeunt, id nimirum sine partibus extat
et minima constat natura nec fuit umquam
per se secretum neque posthac esse valebit,
alterius quoniamst ipsum pars, primaque et una
inde aliae atque aliae similes ex ordine partes 605
agmine condenso naturam corporis explent,
quae quoniam per se nequeunt constare, necessest
haerere unde queant nulla ratione revelli.
sunt igitur solida primordia simplicitate
quae minimis stipata cohaerent partibus arte, 610
non ex illarum conventu conciliata,
sed magis aeterna pollentia simplicitate,
unde neque avelli quicquam neque deminui iam
concedit natura reservans semina rebus.
praeterea nisi erit minimum, parvissima quaeque 615
corpora constabunt ex partibus infinitis,
quippe ubi dimidiae partis pars semper habebit
dimidiam partem nec res praefiniet ulla.
ergo rerum inter summam minimamque quid escit?
nil erit ut distet ; nam quamvis funditus omnis 620
summa sit infinita, tamen, parvissima quae sunt,
ex infinitis constabunt partibus aeque.
quod quoniam ratio reclamat vera negatque

credere posse animum, victus fateare necessest
esse ea quae nullis iam praedita partibus extent 625
et minima constent natura. quae quoniam sunt,
illa quoque esse tibi solida atque aeterna fatendum.
denique si minimas in partis cuncta resolvi
cogere consuesset rerum natura creatrix,
iam nil ex illis eadem reparare valeret 630
propterea quia, quae nullis sunt partibus aucta,
non possunt ea quae debet genitalis habere
materies, varios conexus pondera plagas
concursus motus, per quae res quaeque geruntur.
Quapropter qui materiem rerum esse putarunt 635
ignem atque ex igni summam consistere solo,
magno opere a vera lapsi ratione videntur.
Heraclitus init quorum dux proelia primus,
clarus ob obscuram linguam magis inter inanis
quamde gravis inter Graios qui vera requirunt. 640
omnia enim stolidi magis admirantur amantque,
inversis quae sub verbis latitantia cernunt,
veraque constituunt quae belle tangere possunt
auris et lepido quae sunt fucata sonore.
Nam cur tam variae res possint esse requiro, 645
ex uno si sunt igni puroque creatae;
nil prodesset enim calidum denserier ignem
nec rarefieri, si partes ignis eandem
naturam quam totus habet super ignis haberent.
acrior ardor enim conductis partibus esset, 650
languidior porro disiectis disque supatis:
amplius hoc fieri nil est quod posse rearis
talibus in causis, nedum variantia rerum
tanta queat densis rarisque ex ignibus esse.
id quoque, si faciant admixtum rebus inane, 655
denseri poterunt ignes rarique relinqui.
sed quia multa sibi cernunt contraria nasci
et fugitant in rebus inane relinquere purum,

ardua dum metuunt, amittunt vera viai,
nec rursum cernunt exempto rebus inani 660
omnia denseri fierique ex omnibus unum
corpus, nil ab se quod possit mittere raptim;
aestifer ignis uti lumen iacit atque vaporem,
ut videas non e stipatis partibus esse.
quod si forte alia credunt ratione potesse 665
ignis in coetu stingui mutareque corpus,
scilicet ex nulla facere id si parte reparcent,
occidet ad nilum nimirum funditus ardor
omnis et e nilo fient quaecumque creantur.
nam quodcumque suis mutatum finibus exit, 670
continuo hoc mors est illius quod fuit ante.
proinde aliquit superare necesse est incolume ollis,
ne tibi res redeant ad nilum funditus omnes
de niloque renata vigescat copia rerum.
nunc igitur quoniam certissima corpora quaedam 675
sunt quae conservant naturam semper eandem,
quorum abitu aut aditu mutatoque ordine mutant
naturam res et convertunt corpora sese,
scire licet non esse haec ignea corpora rerum.
nil referret enim quaedam decedere, abire, 680
atque alia adtribui, mutarique ordine quaedam,
si tamen ardoris naturam cuncta tenerent;
ignis enim foret omnimodis quodcumque crearent.
verum, ut opinor, itast: sunt quaedam corpora quorum
concursus motus ordo positura figurae 685
efficiunt ignis, mutatoque ordine mutant
naturam neque sunt igni simulata neque ulli
praeterea rei quae corpora mittere possit
sensibus et nostros adiectu tangere tactus.

Dicere porro ignem res omnis esse neque ullam 690
rem veram in numero rerum constare nisi ignem,
quod facit hic idem, perdelirum esse videtur.
nam contra sensus ab sensibus ipse repugnat

et labefactat eos, unde omnia credita pendent,
unde hic cognitus est ipsi quem nominat ignem ; 695
credit enim sensus ignem cognoscere vere,
cetera non credit, quae nilo clara minus sunt.
quod mihi cum vanum tum delirum esse videtur ;
quo referemus enim ? quid nobis certius ipsis
sensibus esse potest, qui vera ac falsa notemus ? 700
praeterea quare quisquam magis omnia tollat
et velit ardoris naturam linquere solam,
quam neget esse ignis, quidvis tamen esse relinquat ?
aequa videtur enim dementia dicere utrumque.

Quapropter qui materiem rerum esse putarunt 705
ignem atque ex igni summam consistere posse,
et qui principium gignundis aëra rebus
constituere, aut umorem quicumque putarunt
fingere res ipsum per se, terramve creare
omnia et in rerum naturas vertier omnis, 710
magno opere a vero longe derrasse videntur.
adde etiam qui conduplicant primordia rerum
aëra iungentes igni terramque liquori,
et qui quattuor ex rebus posse omnia rentur
ex igni terra atque anima procrescere et imbri. 715
quorum Acragantinus cum primis Empedocles est,
insula quem triquetris terrarum gessit in oris,
quam fluitans circum magnis anfractibus aequor
Ionium glaucis aspargit virus ab undis,
angustoque fretu rapidum mare dividit undis 720
Italiae terrarum oras a finibus eius.
hic est vasta Charybdis et hic Aetnaea minantur
murmura flammarum rursum se colligere iras,
faucibus eruptos iterum vis ut vomat ignis
ad caelumque ferat flammai fulgura rursum. 725
quae cum magna modis multis miranda videtur
gentibus humanis regio visendaque fertur,
rebus opima bonis, multa munita virum vi,

nil tamen hoc habuisse viro praeclarius in se
nec sanctum magis et mirum carumque videtur. 730
carmina quin etiam divini pectoris eius
vociferantur et exponunt praeclara reperta,
ut vix humana videatur stirpe creatus.

Hic tamen et supra quos diximus inferiores
partibus egregie multis multoque minores, 735
quamquam multa bene ac divinitus invenientes
ex adyto tamquam cordis responsa dedere
sanctius et multo certa ratione magis quam
Pythia quae tripodi a Phoebi lauroque profatur,
principiis tamen in rerum fecere ruinas 740
et graviter magni magno cecidere ibi casu;
primum quod motus exempto rebus inani
constituunt, et res mollis rarasque relinquont,
aëra solem ignem terras animalia frugis,
nec tamen admiscent in eorum corpus inane; 745
deinde quod omnino finem non esse secandis
corporibus faciunt neque pausam stare fragori
nec prorsum in rebus minimum consistere quicquam;
cum videamus id extremum cuiusque cacumen
esse quod ad sensus nostros minimum esse videtur, 750
conicere ut possis ex hoc, quae cernere non quis
extremum quod habent, minimum consistere in illis.
huc accedit item, quoniam primordia rerum
mollia constituunt, quae nos nativa videmus
esse et mortali cum corpore funditus, utqui 755
debeat ad nilum iam rerum summa reverti
de niloque renata vigescere copia rerum;
quorum utrumque quid a vero iam distet habebis.
deinde inimica modis multis sunt atque veneno
ipsa sibi inter se; quare aut congressa peribunt 760
aut ita diffugient ut tempestate coacta
fulmina diffugere atque imbris ventosque videmus.

Denique quattuor ex rebus si cuncta creantur

atque in eas rursum res omnia dissoluuntur,
qui magis illa queunt rerum primordia dici 765
quam contra res illorum retroque putari?
alternis gignuntur enim mutantque colorem
et totam inter se naturam tempore ab omni.
sin ita forte putas ignis terraeque coire 770
corpus et aërias auras roremque liquoris,
nil in concilio naturam ut mutet eorum,
nulla tibi ex illis poterit res esse creata,
non animans, non exanimo cum corpore, ut arbos;
quippe suam quicque in coetu variantis acervi 775
naturam ostendet mixtusque videbitur aër
cum terra simul atque ardor cum rore manere.
at primordia gignundis in rebus oportet
naturam clandestinam caecamque adhibere,
emineat nequid quod contra pugnet et obstet 780
quominus esse queat proprie quodcumque creatur.
Quin etiam repetunt a caelo atque ignibus eius
et primum faciunt ignem se vertere in auras
aëris, hinc imbrem gigni terramque creari
ex imbri retroque a terra cuncta reverti, 785
umorem primum, post aëra, deinde calorem,
nec cessare haec inter se mutare, meare
a caelo ad terram, de terra ad sidera mundi.
quod facere haud ullo debent primordia pacto;
immutabile enim quiddam superare necessest, 790
ne res ad nilum redigantur funditus omnes.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
quapropter quoniam quae paulo diximus ante
in commutatum veniunt, constare necessest 795
ex aliis ea, quae nequeant convertier usquam,
ne tibi res redeant ad nilum funditus omnes.
quin potius tali natura praedita quaedam
corpora constituas, ignem si forte crearint,

posse eadem demptis paucis paucisque tributis, 800
ordine mutato et motu, facere aëris auras,
sic alias aliis rebus mutarier omnis?

'At manifesta palam res indicat' inquis 'in auras
aëris e terra res omnis crescere alique;
et nisi tempestas indulget tempore fausto 805
imbribus, ut tabe nimborum arbusta vacillent,
solque sua pro parte fovet tribuitque calorem,
crescere non possint fruges arbusta animantis.'
scilicet et nisi nos cibus aridus et tener umor
adiuvet, amisso iam corpore vita quoque omnis 810
omnibus e nervis atque ossibus exsoluatur;
adiutamur enim dubio procul atque alimur nos
certis ab rebus, certis aliae atque aliae res.
nimirum quia multa modis communia multis
multarum rerum in rebus primordia mixta 815
sunt, ideo variis variae res rebus aluntur.
atque eadem magni refert primordia saepe
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque;
namque eadem caelum mare terras flumina solem 820
constituunt, eadem fruges arbusta animantis,
verum aliis alioque modo commixta moventur.
quin etiam passim nostris in versibus ipsis
multa elementa vides multis communia verbis,
cum tamen inter se versus ac verba necessest 825
confiteare et re et sonitu distare sonanti.
tantum elementa queunt permutato ordine solo;
at rerum quae sunt primordia, plura adhibere
possunt unde queant variae res quaeque creari.

Nunc et Anaxagorae scrutemur homoeomerian 830
quam Grai memorant nec nostra dicere lingua
concedit nobis patrii sermonis egestas,
sed tamen ipsam rem facilest exponere verbis.
principio, rerum quom dicit homoeomerian,

ossa videlicet e pauxillis atque minutis 835
ossibus hic et de pauxillis atque minutis
visceribus viscus gigni sanguenque creari
sanguinis inter se multis coeuntibu' guttis
ex aurique putat micis consistere posse
aurum et de terris terram concrescere parvis, 840
ignibus ex ignis, umorem umoribus esse,
cetera consimili fingit ratione putatque.
nec tamen esse ulla parte idem in rebus inane
concedit neque corporibus finem esse secandis.
quare in utraque mihi pariter ratione videtur 845
errare atque illi, supra quos diximus ante.
adde quod inbecilla nimis primordia fingit;
si primordia sunt, simili quae praedita constant
natura atque ipsae res sunt aequeque laborant
et pereunt neque ab exitio res ulla refrenat. 850
nam quid in oppressu valido durabit eorum,
ut mortem effugiat, leti sub dentibus ipsis?
ignis an umor an aura? quid horum? sanguen an ossa?
nil, ut opinor, ubi ex aequo res funditus omnis
tam mortalis erit quam quae manifesta videmus 855
ex oculis nostris aliqua vi victa perire.
at neque reccidere ad nilum res posse neque autem
crescere de nilo testor res ante probatas.
praeterea quoniam cibus auget corpus alitque,
scire licet nobis venas et sanguen et ossa 860
sive cibos omnis commixto corpore dicent
esse et habere in se nervorum corpora parva
ossaque et omnino venas partisque cruoris,
fiet uti cibus omnis, et aridus et liquor ipse,
ex alienigenis rebus constare putetur, 865
ossibus et nervis sanieque et sanguine mixto.
praeterea quaecumque e terra corpora crescunt
si sunt in terris, terram constare necessest

ex alienigenis, quae terris exoriuntur.
transfer item, totidem verbis utare licebit. 870
in lignis si flamma latet fumusque cinisque,
ex alienigenis consistant ligna necessest.
praeterea tellus quae corpora cumque alit, auget
ex alienigenis, quae lignis his oriuntur.

Linquitur hic quaedam latitandi copia tenvis, 875
id quod Anaxagoras sibi sumit, ut omnibus omnis
res putet inmixtas rebus latitare, sed illud
apparere unum cuius sint plurima mixta
et magis in promptu primaque in fronte locata.
quod tamen a vera longe ratione repulsumst. 880
conveniebat enim fruges quoque saepe, minaci
robore cum saxi franguntur, mittere signum
sanguinis aut aliquid, nostro quae corpore aluntur.
consimili ratione herbis quoque saepe decebat,
cum lapidi in lapidem terimus, manare cruorem; 885
et latices dulcis guttas similique sapore
mittere, lanigerae quali sunt ubere lactis,
scilicet et glebis terrarum saepe friatis
herbarum genera et fruges frondesque videri
dispertita inter terram latitare minute, 890
postremo in lignis cinerem fumumque videri,
cum praefracta forent, ignisque latere minutos.
quorum nil fieri quoniam manifesta docet res,
scire licet non esse in rebus res ita mixtas,
verum semina multimodis inmixta latere 895
multarum rerum in rebus communia debent.

'At saepe in magnis fit montibus' inquis 'ut altis
arboribus vicina cacumina summa terantur
inter se, validis facere id cogentibus austris,
donec flammai fulserunt flore coorto.' 900
scilicet et non est lignis tamen insitus ignis,
verum semina sunt ardoris multa, terendo

quae cum confluxere, creant incendia silvis.
quod si facta foret silvis abscondita flamma,
non possent ullum tempus celarier ignes, 905
conficerent volgo silvas, arbusta cremarent.
iamne vides igitur, paulo quod diximus ante,
permagni referre eadem primordia saepe
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque, 910
atque eadem paulo inter se mutata creare
ignes et lignum? quo pacto verba quoque ipsa
inter se paulo mutatis sunt elementis,
cum ligna atque ignes distincta voce notemus.
denique iam quaecumque in rebus cernis apertis 915
si fieri non posse putas, quin materiai
corpora consimili natura praedita fingas,
hac ratione tibi pereunt primordia rerum:
fiet uti risu tremulo concussa cachinnent
et lacrimis salsis umectent ora genasque. 920

Nunc age quod superest cognosce et clarius audi.
nec me animi fallit quam sint obscura; sed acri
percussit thyrso laudis spes magna meum cor
et simul incussit suavem mi in pectus amorem
musarum, quo nunc instinctus mente vigenti 925
avia Pieridum peragro loca nullius ante
trita solo. iuvat integros accedere fontis
atque haurire, iuvatque novos decerpere flores
insignemque meo capiti petere inde coronam
unde prius nulli velarint tempora musae; 930
primum quod magnis doceo de rebus et artis
religionum animum nodis exsolvere pergo,
deinde quod obscura de re tam lucida pango
carmina, musaeo contingens cuncta lepore.
id quoque enim non ab nulla ratione videtur; 935
sed veluti pueris absinthia taetra medentes
cum dare conantur, prius oras pocula circum

contingunt mellis dulci flavoque liquore,
ut puerorum aetas inprovida ludificetur
labrorum tenus, interea perpotet amarum 940
absinthi laticem deceptaque non capiatur,
sed potius tali pacto recreata valescat,
sic ergo nunc, quoniam haec ratio plerumque videtur
tristior esse quibus non est tractata, retroque
volgus abhorret ab hac, volui tibi suaviloquenti 945
carmine Pierio rationem exponere nostram
et quasi musaeo dulci contingere melle,
si tibi forte animum tali ratione tenere
versibus in nostris possem, dum perspicis omnem
naturam rerum qua constet compta figura. 950

Sed quoniam docui solidissima materiai
corpora perpetuo volitare invicta per aevom,
nunc age, summai quaedam sit finis eorum
necne sit, evolvamus; item quod inane repertumst
seu locus ac spatium, res in quo quaeque gerantur, 955
pervideamus utrum finitum funditus omne
constet an immensum pateat vasteque profundum.

Omne quod est igitur nulla regione viarum
finitumst; namque extremum debebat habere.
extremum porro nullius posse videtur 960
esse, nisi ultra sit quod finiat; ut videatur
quo non longius haec sensus natura sequatur.
nunc extra summam quoniam nil esse fatendum,
non habet extremum, caret ergo fine modoque.
nec refert quibus adsistas regionibus eius; 965
usque adeo, quem quisque locum possedit, in omnis
tantundem partis infinitum omne relinquit.
praeterea si iam finitum constituatur
omne quod est spatium, siquis procurrat ad oras
ultimus extremas iaciatque volatile telum, 970
id validis utrum contortum viribus ire
quo fuerit missum mavis longeque volare,

an prohibere aliquid censes obstareque posse?
alterutrum fatearis enim sumasque necessest.
quorum utrumque tibi effugium praecludit et omne 975
cogit ut exempta concedas fine patere.
nam sive est aliquit quod probeat officiatque
quominu' quo missum est veniat finique locet se,
sive foras fertur, non est a fine profectum.
hoc pacto sequar atque, oras ubicumque locaris 980
extremas, quaeram quid telo denique fiat.
fiet uti nusquam possit consistere finis
effugiumque fugae prolatet copia semper.
postremo ante oculos res rem finire videtur;
aër dissaepit collis atque aëra montes, 985
terra mare et contra mare terras terminat omnis;
omne quidem vero nil est quod finiat extra.
Praeterea spatium summai totius omne
undique si inclusum certis consistere oris
finitumque foret, iam copia materiai 990
undique ponderibus solidis confluxet ad imum
nec res ulla geri sub caeli tegmine posset
nec foret omnino caelum neque lumina solis,
quippe ubi materies omnis cumulata iaceret
ex infinito iam tempore subsidendo. 995
at nunc nimirum requies data principiorum
corporibus nullast, quia nil est funditus imum
quo quasi confluere et sedes ubi ponere possint.
semper in adsiduo motu res quaeque geruntur
partibus e cunctis infernaque suppeditantur 1000
ex infinito cita corpora materiai.
est igitur natura loci spatiumque profundi,
quod neque clara suo percurrere fulmina cursu
perpetuo possint aevi labentia tractu
nec prorsum facere ut restet minus ire meando: 1005
usque adeo passim patet ingens copia rebus
finibus exemptis in cunctas undique partis.

Ipsa modum porro sibi rerum summa parare
ne possit, natura tenet, quae corpus inani
et quod inane autem est finiri corpore cogit, 1010
ut sic alternis infinita omnia reddat,
aut etiam alterutrum, nisi terminet alterum, eorum
simplice natura pateat tamen inmoderatum.

*

nec mare nec tellus neque caeli lucida templa
nec mortale genus nec divum corpora sancta 1015
exiguum possent horai sistere tempus;
nam dispulsa suo de coetu materiai
copia ferretur magnum per inane soluta,
sive adeo potius numquam concreta creasset
ullam rem, quoniam cogi disiecta nequisset. 1020
nam certe neque consilio primordia rerum
ordine se suo quaeque sagaci mente locarunt
nec quos quaeque darent motus pepigere profecto,
sed quia multa modis multis mutata per omne
ex infinito vexantur percita plagis, 1025
omne genus motus et coetus experiundo
tandem deveniunt in talis dispositura,
qualibus haec rerum consistit summa creata,
et multos etiam magnos servata per annos
ut semel in motus coniectast convenientis, 1030
efficit ut largis avidum mare fluminis undis
integrent amnes et solis terra vapore
fota novet fetus summissaque gens animantum
floreat et vivant labentes aetheris ignes;
quod nullo facerent pacto, nisi materiai 1035
ex infinito suboriri copia posset,
unde amissa solent reparare in tempore quaeque.
nam veluti privata cibo natura animantum
diffluit amittens corpus, sic omnia debent
dissolui simul ac defecit suppeditare 1040
materies aliqua ratione aversa viai.

nec plagae possunt extrinsecus undique summam
conservare omnem quaecumque est conciliata.
cudere enim crebro possunt partemque morari,
dum veniant aliae ac suppleri summa queatur. 1045
interdum resilire tamen coguntur et una
principiis rerum spatium tempusque fugai
largiri, ut possint a coetu libera ferri.
quare etiam atque etiam suboriri multa necessest,
et tamen ut plagae quoque possint suppetere ipsae, 1050
infinita opus est vis undique materiai.

Illud in his rebus longe fuge credere, Memmi,
in medium summae, quod dicunt, omnia niti,
atque ideo mundi naturam stare sine ullis
ictibus externis neque quoquam posse resolvi 1055
summa atque ima, quod in medium sint omnia nixa:
ipsum si quicquam posse in se sistere credis:
et quae pondera sunt sub terris omnia sursum
nitier in terraque retro requiescere posta,
ut per aquas quae nunc rerum simulacra videmus. 1060
et simili ratione animalia suppa vagari
contendunt neque posse e terris in loca caeli
reccidere inferiora magis quam corpora nostra
sponte sua possint in caeli templa volare;
illi cum videant solem, nos sidera noctis 1065
cernere, et alternis nobiscum tempora caeli
dividere et noctes parilis agitare diebus.
sed vanus stolidis haec
amplexi quod habent perv
nam medium nil esse potest 1070
infinita. neque omnino, si iam medium sit,
possit ibi quicquam consistere
quam quavis alia longe ratione
omnis enim locus ac spatium, quod inane vocamus,
per medium, per non medium, concedere debet 1075
aeque ponderibus, motus quacumque feruntur.

nec quisquam locus est, quo corpora cum venerunt,
ponderis amissa vi possint stare in inani;
nec quod inane autem est ulli subsistere debet,
quin, sua quod natura petit, concedere pergat. 1080
haud igitur possunt tali ratione teneri
res in concilio medii cuppedine victae.

Praeterea quoniam non omnia corpora fingunt
in medium niti, sed terrarum atque liquoris,
et quasi terreno quae corpore contineantur, 1085
umorem ponti magnasque e montibus undas,
at contra tenuis exponunt aëris auras
et calidos simul a medio differrier ignis,
atque ideo totum circum tremere aethera signis
et solis flammam per caeli caerula pasci, 1090
quod calor a medio fugiens se ibi conligat omnis,
nec prorsum arboribus summos frondescere ramos
posse, nisi a terris paulatim cuique cibatum

. . . .
. . . . 1095
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. . . . 1100
. . . .

ne volucri ritu flammarum moenia mundi
diffugiant subito magnum per inane soluta
et ne cetera consimili ratione sequantur
neve ruant caeli penetralia templa superne 1105
terraque se pedibus raptim subducat et omnis
inter permixtas rerum caelique ruinas
corpora solventes abeat per inane profundum,
temporis ut puncto nil extet reliquiarum
desertum praeter spatium et primordia caeca. 1110
nam quacumque prius de parti corpora desse

constitues, haec rebus erit pars ianua leti,
hac se turba foras dabit omnis materiai.
Haec sei pernosces, parva perductus opella
namque alid ex alio clarescet nec tibi caeca 1115
nox iter eripiet quin ultima naturai
pervideas: ita res accendent lumina rebus.

T. LUCRETI CARI

DE RERUM NATURA

LIBER SECUNDUS.

Suave, mari magno turbantibus aequora ventis,
e terra magnum alterius spectare laborem;
non quia vexari quemquamst iucunda voluptas,
sed quibus ipse malis careas quia cernere suave est.
suave etiam belli certamina magna tueri 5
per campos instructa tua sine parte pericli.
sed nil dulcius est, bene quam munita tenere
edita doctrinā sapientum templa serena,
despicere unde queas alios passimque videre
errare atque viam palantis quaerere vitae, 10
certare ingenio, contendere nobilitate,
noctes atque dies niti praestante labore
ad summas emergere opes rerumque potiri.
o miseras hominum mentes, o pectora caeca!
qualibus in tenebris vitae quantisque periclis 15
degitur hoc aevi quodcumquest! nonne videre
nil aliud sibi naturam latrare, nisi utqui
corpore seiunctus dolor absit, mente fruatur
iucundo sensu cura semota metuque?
ergo corpoream ad naturam pauca videmus 20
esse opus omnino, quae demant cumque dolorem,
delicias quoque uti multas substernere possint.
gratius interdum, neque natura ipsa requirit,

si non aurea sunt iuvenum simulacra per aedes
lampadas igniferas manibus retinentia dextris, 25
lumina nocturnis epulis ut suppeditentur,
nec domus argento fulget auroque renidet
nec citharae reboant laqueata aurataque tecta,
cum tamen inter se prostrati in gramine molli
propter aquae rivum sub ramis arboris altae 30
non magnis opibus iucunde corpora curant,
praesertim cum tempestas adridet et anni
tempora conspergunt viridantis floribus herbas.
nec calidae citius decedunt corpore febres,
textilibus si in picturis ostroque rubenti 35
iacteris, quam si in plebeia veste cubandum est.
quapropter quoniam nil nostro in corpore gazae
proficiunt neque nobilitas nec gloria regni,
quod superest, animo quoque nil prodesse putandum;
si non forte tuas legiones per loca campi 40
fervere cum videas belli simulacra cientis,
subsidiis magnis et ecum vi constabilitas,
ornatasque armis statuas pariterque animatas,
his tibi tum rebus timefactae religiones
effugiunt animo pavide; mortisque timores 45
tum vacuum pectus lincunt curaque solutum,
fervere cum videas classem lateque vagari.
quod si ridicula haec ludibriaque esse videmus,
re veraque metus hominum curaeque sequaces
nec metuunt sonitus armorum nec fera tela
audacterque inter reges rerumque potentis 50
versantur neque fulgorem reverentur ab auro
nec clarum vestis splendorem purpureai,
quid dubitas quin omni' sit haec rationi' potestas?
omnis cum in tenebris praesertim vita laboret.
nam veluti pueri trepidant atque omnia caecis 55
in tenebris metuunt, sic nos in luce timemus
interdum, nilo quae sunt metuenda magis quam

quae pueri in tenebris pavitant finguntque futura.
hunc igitur terrorem animi tenebrasque necessest
non radii solis neque lucida tela diei 60
discutiant, sed naturae species ratioque.

Nunc age, quo motu genitalia materiai
corpora res varias gignant genitasque resolvant
et qua vi facere id cogantur quaeque sit ollis
reddita mobilitas magnum per inane meandi, 65
expediam : tu te dictis praebere memento.
nam certe non inter se stipata cohaeret
materies, quoniam minui rem quamque videmus
et quasi longinquo fluere omnia cernimus aevo
ex oculisque vetustatem subducere nostris, 70
cum tamen incolumis videatur summa manere
propterea quia, quae decedunt corpora cuique,
unde abeunt minuunt, quo venere augmine donant,
illa senescere at haec contra florescere cogunt,
nec remorantur ibi. sic rerum summa novatur 75
semper, et inter se mortales mutua vivunt.
augescunt aliae gentes, aliae minuuntur,
inque brevi spatio mutantur saecla animantum
et quasi cursores vitai lampada tradunt.

Si cessare putas rerum primordia posse 80
cessandoque novos rerum progignere motus,
avius a vera longe ratione vagaris.
nam quoniam per inane vagantur, cuncta necessest
aut gravitate sua ferri primordia rerum
aut ictu forte alterius. nam cum cita saepe 85
obvia conflixere, fit ut diversa repente
dissiliant ; neque enim mirum, durissima quae sint
ponderibus solidis neque quicquam a tergo ibus obstet.
et quo iactari magis omnia materiai
corpora pervideas, reminiscere totius imum 90
nil esse in summa, neque habere ubi corpora prima
consistant, quoniam spatium sine fine modoquest

inmensumque patere in cunctas undique partis
pluribus ostendi et certa ratione probatumst.
quod quoniam constat, nimirum nulla quies est 95
reddita corporibus primis per inane profundum,
sed magis adsiduo varioque exercita motu
partim intervallis magnis confulta resultant,
pars etiam brevibus spatiis vexantur ab ictu.
et quaecumque magis condenso conciliatu 100
exiguis intervallis convecta resultant,
indupedita suis perplexis ipsa figuris,
haec validas saxi radices et fera ferri
corpora constituunt et cetera de genere horum
paucula quae porro magnum per inane vagantur. 105
cetera dissiliunt longe longeque recursant
in magnis intervallis: haec aëra rarum
sufficiunt nobis et splendida lumina solis.
multaque praeterea magnum per inane vagantur,
conciliis rerum quae sunt reiecta nec usquam 110
consociare etiam motus potuere recepta.
cuius, uti memoro, rei simulacrum et imago
ante oculos semper nobis versatur et instat.
contemplator enim, cum solis lumina cumque
inserti fundunt radii per opaca domorum: 115
multa minuta modis multis per inane videbis
corpora misceri radiorum lumine in ipso
et velut aeterno certamine proelia pugnas
edere turmatim certantia nec dare pausam,
conciliis et discidiis exercita crebris; 120
conicere ut possis ex hoc, primordia rerum
quale sit in magno iactari semper inani.
dumtaxat rerum magnarum parva potest res
exemplare dare et vestigia notitiai.
hoc etiam magis haec animum te advertere par est 125
corpora quae in solis radiis turbare videntur,
quod tales turbae motus quoque materiai

significant clandestinos caecosque subesse.
multa videbis enim plagis ibi percita caecis
commutare viam retroque repulsa reverti 130
nunc huc nunc illuc in cunctas undique partis.
scilicet hic a principiis est omnibus error.
prima moventur enim per se primordia rerum;
inde ea quae parvo sunt corpora conciliatu
et quasi proxima sunt ad viris principiorum, 135
ictibus illorum caecis inpulsa cientur,
ipsaque proporro paulo maiora lacessunt.
sic a principiis ascendit motus et exit
paulatim nostros ad sensus, ut moveantur
illa quoque, in solis quae lumine cernere quimus 140
nec quibus id faciant plagis apparet aperte.

Nunc quae mobilitas sit reddita materiai
corporibus, paucis licet hinc cognoscere, Memmi.
primum aurora novo cum spargit lumine terras
et variae volucres nemora avia pervolitantes 145
aëra per tenerum liquidis loca vocibus opplent,
quam subito soleat sol ortus tempore tali
convestire sua perfundens omnia luce,
omnibus in promptu manifestumque esse videmus.
at vapor is quem sol mittit lumenque serenum 150
non per inane meat vacuum; quo tardius ire
cogitur, aërias quasi dum diverberet undas.
nec singillatim corpuscula quaeque vaporis
sed complexa meant inter se conque globata;
quapropter simul inter se retrahuntur et extra 155
officiuntur, uti cogantur tardius ire.
at quae sunt solida primordia simplicitate,
cum per inane meant vacuum nec res remoratur
ulla foris atque ipsa, suis e partibus una,
unum in quem coepere locum conixa feruntur, 160
debent nimirum praecellere mobilitate
et multo citius ferri quam lumina solis

multiplexque loci spatium transcurrere eodem
tempore quo solis pervolgant fulgura caelum.

*

[nec persectari primordia singula quaeque, 165
ut videant qua quicque geratur cum ratione.
  At quidam contra haec, ignari materiai,
naturam non posse deum sine numine credunt
tanto opere humanis rationibus admoderate
tempora mutare annorum frugesque creare, 170
et iam cetera, mortalis quae suadet adire
ipsaque deducit dux vitae dia voluptas
et res per Veneris blanditur saecla propagent,
ne genus occidat humanum. quorum omnia causa
constituisse deos cum fingunt, omnibu' rebus 175
magno opere a vera lapsi ratione videntur.
nam quamvis rerum ignorem primordia quae sint,
hoc tamen ex ipsis caeli rationibus ausim
confirmare aliisque ex rebus reddere multis,
nequaquam nobis divinitus esse creatam 180
naturam mundi: tanta stat praedita culpa.
quae tibi posterius, Memmi, faciemus aperta.
nunc id quod superest de motibus expediemus.]
  Nunc locus est, ut opinor, in his illud quoque rebus
confirmare tibi, nullam rem posse sua vi 185
corpoream sursum ferri sursumque meare;
ne tibi dent in eo flammarum corpora fraudem.
sursus enim versus gignuntur et augmina sumunt
et sursum nitidae fruges arbustaque crescunt,
pondera, quantum in se est, cum deorsum cuncta ferantur.
nec cum subsiliunt ignes ad tecta domorum 191
et celeri flamma degustant tigna trabesque,
sponte sua facere id sine vi subigente putandum est.
quod genus e nostro quom missus corpore sanguis
emicat exultans alte spargitque cruorem. 195
nonne vides etiam quanta vi tigna trabesque

respuat umor aquae? nam quo magis ursimus alte
derecta et magna vi multi pressimus aegre,
tam cupide sursum revomit magis atque remittit,
plus ut parte foras emergant exiliantque. 200
nec tamen haec, quantum est in se, dubitamus, opinor,
quin vacuum per inane deorsum cuncta ferantur.
sic igitur debent flammae quoque posse per auras
aëris expressae sursum succedere, quamquam
pondera, quantum in sest, deorsum deducere pugnent, 205
nocturnasque faces caeli sublime volantis
nonne vides longos flammarum ducere tractus
in quascumque dedit partis natura meatum?
non cadere in terram stellas et sidera cernis?
sol etiam caeli de vertice dissipat omnis 210
ardorem in partis et lumine conserit arva;
in terras igitur quoque solis vergitur ardor.
transversosque volare per imbris fulmina cernis:
nunc hinc nunc illinc abrupti nubibus ignes
concursant; cadit in terras vis flammea volgo. 215

Illud in his quoque te rebus cognoscere avemus,
corpora cum deorsum rectum per inane feruntur,
ponderibus propriis, se incerto tempore ferme
incertisque loci spatiis depellere paulum,
tantum quod momen mutatum dicere possis. 220
quod nisi declinare solerent, omnia deorsum,
imbris uti guttae, caderent per inane profundum,
nec foret offensus natus nec plaga creata
principiis: ita nil umquam natura creasset.

Quod si forte aliquis credit graviora potesse 225
corpora, quo citius rectum per inane feruntur,
incidere ex supero levioribus atque ita plagas
gignere quae possint genitalis reddere motus,
avius a vera longe ratione recedit.
nam per aquas quaecumque cadunt atque aëra rarum, 230
haec pro ponderibus casus celerare necessest

propterea quia corpus aquae naturaque tenvis
aëris haut possunt aeque rem quamque morari,
sed citius cedunt gravioribus exsuperata;
at contra nulli de nulla parte neque ullo 235
tempore inane potest vacuum subsistere rei,
quin, sua quod natura petit, concedere pergat;
omnia quapropter debent per inane quietum
aeque ponderibus non aequis concita ferri.
haud igitur poterunt levioribus incidere umquam 240
ex supero graviora neque ictus gignere per se
qui varient motus per quos natura gerat res.
quare etiam atque etiam paulum inclinare necessest
corpora; nec plus quam minimum, ne fingere motus
obliquos videamur et id res vera refutet. 245
namque hoc in promptu manifestumque esse videmus,
pondera, quantum in sest, non posse obliqua meare,
ex supero cum praecipitant, quod cernere possis;
sed nil omnino recta regione viai
declinare quis est qui possit cernere sese? 250
Denique si semper motus conectitur omnis
et vetere exoritur semper novus ordine certo
nec declinando faciunt primordia motus
principium quoddam quod fati foedera rumpat,
ex infinito ne causam causa sequatur, 255
libera per terras unde haec animantibus exstat,
unde est haec, inquam, fatis avolsa potestas
per quam progredimur quo ducit quemque voluntas,
declinamus item motus nec tempore certo
nec regione loci certa, sed ubi ipsa tulit mens? 260
nam dubio procul his rebus sua cuique voluntas
principium dat et hinc motus per membra rigantur.
nonne vides etiam patefactis tempore puncto
carceribus non posse tamen prorumpere equorum
vim cupidam tam de subito quam mens avet ipsa? 265
omnis enim totum per corpus materiai

copia conquiri debet, concita per artus
omnis ut studium mentis conixa sequatur;
ut videas initum motus a corde creari
ex animique voluntate id procedere primum, 270
inde dari porro per totum corpus et artus.
nec similest ut cum impulsi procedimus ictu
viribus alterius magnis magnoque coactu;
nam tum materiem totius corporis omnem
perspicuumst nobis invitis ire rapique, 275
donec eam refrenavit per membra voluntas.
iamne vides igitur, quamquam vis extera multos
pellat et invitos cogat procedere saepe
praecipitesque rapi, tamen esse in pectore nostro
quiddam quod contra pugnare obstareque possit? 280
cuius ad arbitrium quoque copia materiai
cogitur interdum flecti per membra per artus
et proiecta refrenatur retroque residit.
quare in seminibus quoque idem fateare necessest,
esse aliam praeter plagas et pondera causam 285
motibus, unde haec est nobis innata potestas,
de nilo quoniam fieri nil posse videmus.
pondus enim prohibet ne plagis omnia fiant
externa quasi vi; sed ne mens ipsa necessum
intestinum habeat cunctis in rebus agendis 290
et devicta quasi hoc cogatur ferre patique,
id facit exiguum clinamen principiorum
nec regione loci certa nec tempore certo.

Nec stipata magis fuit umquam materiai
copia nec porro maioribus intervallis; 295
nam neque adaugescit quicquam neque deperit inde.
quapropter quo nunc in motu principiorum
corpora sunt, in eodem ante acta aetate fuere
et post haec semper simili ratione ferentur,
et quae consuerint gigni gignentur eadem 300
condicione et erunt et crescent vique valebunt,

quantum cuique datum est per foedera naturai.
nec rerum summam commutare ulla potest vis;
nam neque, quo possit genus ullum materiai
effugere ex omni, quicquam est extra, neque in omne 305
unde coorta queat nova vis inrumpere et omnem
naturam rerum mutare et vertere motus.

Illud in his rebus non est mirabile, quare,
omnia cum rerum primordia sint in motu,
summa tamen summa videatur stare quiete, 310
praeterquam siquid proprio dat corpore motus.
omnis enim longe nostris ab sensibus infra
primorum natura iacet: quapropter, ubi ipsa
cernere iam nequeas, motus quoque surpere debent;
praesertim cum, quae possimus cernere, celent 315
saepe tamen motus spatio diducta locorum.
nam saepe in colli tondentes pabula laeta
lanigerae reptant pecudes quo quamque vocantes
invitant herbae gemmantes rore recenti,
et satiati agni ludunt blandeque coruscant; 320
omnia quae nobis longe confusa videntur
et velut in viridi candor consistere colli.
praeterea magnae legiones cum loca cursu
camporum complent belli simulacra cientes,
fulgor ibi ad caelum se tollit totaque circum 325
aere renidescit tellus supterque virum vi
excitur pedibus sonitus clamoreque montes
icti reiectant voces ad sidera mundi
et circumvolitant equites mediosque repente
tramittunt valido quatientes impete campos. 330
et tamen est quidam locus altis montibus unde
stare videntur et in campis consistere fulgor.

Nunc age iam deinceps cunctarum exordia rerum
qualia sint et quam longe distantia formis
percipe, multigenis quam sint variata figuris; 335
non quo multa parum simili sint praedita forma,

sed quia non volgo paria omnibus omnia constant.
nec mirum; nam cum sit eorum copia tanta
ut neque finis, uti docui, neque summa sit ulla,
debent nimirum non omnibus omnia prorsum 340
esse pari filo similique adfecta figura.
praeter eat genus humanum mutaeque natantes
squamigerum pecudes et laeta armenta feraeque
et variae volucres, laetantia quae loca aquarum
concelebrant circum ripas fontisque lacusque, 345
et quae pervolgant nemora avia pervolitantes;
quorum unum quidvis generatim sumere perge,
invenies tamen inter se differre figuris.
nec ratione alia proles cognoscere matrem
nec mater posset prolem; quod posse videmus 350
nec minus atque homines inter se nota cluere.
nam saepe ante deum vitulus delubra decora
turicremas propter mactatus concidit aras
sanguinis expirans calidum de pectore flumen;
at mater viridis saltus orbata peragrans 355
noscit humi pedibus vestigia pressa bisulcis,
omnia convisens oculis loca si queat usquam
conspicere amissum fetum, completque querellis
frondiferum nemus absistens et crebra revisit
ad stabulum desiderio perfixa iuvenci, 360
nec tenerae salices atque herbae rore vigentes
fluminaque illa queunt summis labentia ripis
oblectare animum subitamque avertere curam,
nec vitulorum aliae species per pabula laeta
derivare queunt animum curaque levare: 365
usque adeo quiddam proprium notumque requirit.
praeterea teneri tremulis cum vocibus haedi
cornigeras norunt matres agnique petulci
balantum pecudes: ita, quod natura reposcit,
ad sua quisque fere decurrunt ubera lactis. 370
postremo quodvis frumentum non tamen omne

quique suo genere inter se simile esse videbis,
quin intercurrat quaedam distantia formis.
concharumque genus parili ratione videmus
pingere telluris gremium, qua mollibus undis 375
litoris incurvi bibulam pavit aequor harenam.
quare etiam atque etiam simili ratione necessest,
natura quoniam constant neque facta manu sunt
unius ad certam formam primordia rerum,
dissimili inter se quaedam volitare figura. 380

Perfacile est tali ratione exsolvere nobis
quare fulmineus multo penetralior ignis
quam noster fuat e taedis terrestribus ortus;
dicere enim possis caelestem fulminis ignem
suptilem magis e parvis constare figuris 385
atque ideo transire foramina quae nequit ignis
noster hic e lignis ortus taedaque creatus.
praterea lumen per cornum transit, at imber
respuitur. quare? nisi luminis illa minora
corpora sunt quam de quibus est liquor almus aquarum.
et quamvis subito per colum vina videmus 391
perfluere; at contra tardum cunctatur olivom,
aut quia nimirum maioribus est elementis
aut magis hamatis inter se perque plicatis,
atque ideo fit uti non tam diducta repente 395
inter se possint primordia singula quaeque
singula per cuiusque foramina permanare.

Huc accedit uti mellis lactisque liquores
iucundo sensu linguae tractentur in ore;
at contra taetra absinthi natura ferique 400
centauri foedo pertorquent ora sapore;
ut facile agnoscas e levibus atque rutundis
esse ea quae sensus iucunde tangere possunt,
at contra quae amara atque aspera cumque videntur,
haec magis hamatis inter se nexa teneri 405
propterea que solere vias rescindere nostris

sensibus introituque suo perrumpere corpus.
  Omnia postremo bona sensibus et mala tactu
dissimili inter se pugnant perfecta figura;
ne tu forte putes serrae stridentis acerbum 410
horrorem constare elementis levibus aeque
ac musaea mele, per chordas organici quae
mobilibus digitis expergefacta figurant;
neu simili penetrare putes primordia forma
in nares hominum, cum taetra cadavera torrent, 415
et cum scena croco Cilici perfusa recens est
araque Panchaeos exhalat propter odores;
neve bonos rerum simili constare colores
semine constituas, oculos qui pascere possunt,
et qui conpungunt aciem lacrimareque cogunt 420
aut foeda specie diri turpesque videntur.
omnis enim, sensus quae mulcet cumque, figura
haut sine principiali aliquo levore creatast;
at contra quaecumque molesta atque aspera constat,
non aliquo sine materiae squalore repertast. 425
sunt etiam quae iam nec levia iure putantur
esse neque omnino flexis mucronibus unca,
sed magis angellis paulum prostantibus, utqui
titillare magis sensus quam laedere possint;
faecula iam quo de genere est inulaeque sapores. 430
denique iam calidos ignis gelidamque pruinam
dissimili dentata modo conpungere sensus
corporis, indicio nobis est tactus uterque.
tactus enim, tactus, pro divum numina sancta,
corporis est sensus, vel cum res extera sese 435
insinuat, vel cum laedit quae in corpore natast
aut iuvat egrediens genitalis per Veneris res,
aut ex offensu cum turbant corpore in ipso
semina confunduntque inter se concita sensum;
ut si forte manu quamvis iam corporis ipse 440
tute tibi partem ferias atque experiare.

quapropter longe formas distare necessest
principiis, varios quae possint edere sensus.
Denique quae nobis durata ac spissa videntur,
haec magis hamatis inter sese esse necessest 445
et quasi ramosis alte compacta teneri.
in quo iam genere in primis adamantina saxa
prima acie constant ictus contemnere sueta
et validi silices ac duri robora ferri
aeraque quae claustris restantia vociferantur. 450
illa quidem debent e levibus atque rutundis
esse magis, fluvido quae corpore liquida constant;
[namque papaveris haustus itemst facilis quod aquarum]
nec retinentur enim inter se glomeramina quaeque
et procursus item proclive volubilis exstat. 455
omnia postremo quae puncto tempore cernis
diffugere, ut fumum nebulas flammasque, necessest,
si minus omnibu' sunt e levibus atque rutundis,
at non esse tamen perplexis indupedita,
pungere uti possint corpus penetrareque vesca, 460
nec tamen haerere inter se; quodcumque videmus
sensibu' sedatum, facile ut cognoscere possis
non e perplexis sed acutis esse elementis.
sed quod amara vides eadem quae fluvida constant,
sudor uti maris est, minime mirabile habeto; 465
nam quod fluvidus est, e levibus atque rutundis
est, et squalida multa creant admixta doloris
corpora; nec tamen haec reteneri hamata necessumst;
scilicet esse globosa tamen, cum squalida constent,
provolvi simul ut possint et laedere sensus. 470
et quo mixta putes magis aspera levibus esse
principiis, unde est Neptuni corpus acerbum,
est ratio secernendi; seorsumque videndi
umor dulcis, ubi per terras crebrius idem
percolatur, ut in foveam fluat ac mansuescat; 475
linquit enim supera taetri primordia viri,

aspera quom magis in terris haerescere possint.
  Quod quoniam docui, pergam conectere rem quae
ex hoc apta fidem ducat, primordia rerum
finita variare figurarum ratione. 480
quod si non ita sit, rursum iam semina quaedam
esse infinito debebunt corporis auctu.
namque in eodem, una cuiusvis in brevitate
corporis inter se multum variare figurae
non possunt: fac enim minimis e partibus esse 485
corpora prima tribus, vel paulo pluribus auge;
nempe ubi eas partis unius corporis omnis,
summa atque ima locans, transmutans dextera laevis,
omnimodis expertus eris, quam quisque det ordo
formai speciem totius corporis eius, 490
quod superest, si forte voles variare figuras,
addendum partis alias erit, inde sequetur,
adsimili ratione alias ut postulet ordo,
si tu forte voles etiam variare figuras.
ergo formarum novitatem corporis augmen 495
subsequitur. quare non est ut credere possis
esse infinitis distantia semina formis,
ne quaedam cogas inmani maximitate
esse, supra quod iam docui non posse probari.
iam tibi barbaricae vestes Meliboeaque fulgens 500
purpura Thessalico concharum tacta colore,
[illegible]
aurea pavonum ridenti imbuta lepore
saecla, novo rerum superata colore iacerent
et contemptus odor smyrnae mellisque sapores
et cycnea mele Phoebeaque daedala chordis 505
carmina consimili ratione oppressa silerent;
namque aliis aliud praestantius exoreretur.
cedere item retro possent in deteriores
omnia sic partis, ut diximus in melioris;
namque aliis aliud retro quoque taetrius esset 510

naribus auribus atque oculis orisque sapori.
quae quoniam non sunt, sed rebus reddita certa
finis utrimque tenet summam, fateare necessest
materiem quoque finitis differre figuris.
denique ab ignibus ad gelidas iter usque pruinas 515
finitumst retroque pari ratione remensumst;
omnis enim calor ac frigus, mediique tepores
interutrasque iacent explentes ordine summam.
ergo finita distant ratione creata,
ancipiti quoniam mucroni utrimque notantur, 520
hinc flammis illinc rigidis infesta pruinis.

Quod quoniam docui, pergam conectere rem quae
ex hoc apta fidem ducat, primordia rerum,
inter se simili quae sunt perfecta figura,
infinita cluere. etenim distantia cum sit 525
formarum finita, necesse est quae similes sint
esse infinitas aut summam materiai
finitam constare, id quod non esse probavi
versibus ostendens corpuscula materiai
ex infinito summam rerum usque tenere, 530
undique protelo plagarum continuato.
nam quod rara vides magis esse animalia quaedam
fecundamque minus naturam cernis in illis,
at regione locoque alio terrisque remotis
multa licet genere esse in eo numerumque repleri; 535
sicut quadripedum cum primis esse videmus
in genere anguimanus elephantos, India quorum
milibus e multis vallo munitur eburno,
ut penitus nequeat penetrari: tanta ferarum
vis est, quarum nos perpauca exempla videmus. 540
sed tamen id quoque uti concedam, quamlubet esto
unica res quaedam nativo corpore sola,
cui similis toto terrarum nulla sit orbi;
infinita tamen nisi erit vis materiai
unde ea progigni possit concepta, creari 545

non poterit, neque, quod superest, procrescere alique.
quippe etenim sumam hoc quoque uti finita per omne
corpora iactari unius genitalia rei,
unde ubi qua vi et quo pacto congressa coibunt
materiae tanto in pelago turbaque aliena? 550
non, ut opinor, habent rationem conciliandi;
sed quasi naufragiis magnis multisque coortis
disiectare solet magnum mare transtra guberna
antemnas proram malos tonsasque natantis,
per terrarum omnis oras fluitantia aplustra 555
ut videantur et indicium mortalibus edant,
infidi maris insidias virisque dolumque
ut vitare velint, neve ullo tempore credant,
subdola cum ridet placidi pellacia ponti,
sic tibi si finita semel primordia quaedam 560
constitues, aevom debebunt sparsa per omnem
disiectare aestus diversi materiai,
numquam in concilium ut possint compulsa coire
nec remorari in concilio nec crescere adaucta;
quorum utrumque palam fieri manifesta docet res, 565
et res progigni et genitas procrescere posse.
esse igitur genere in quovis primordia rerum
infinita palam est unde omnia suppeditantur.

Nec superare queunt motus itaque exitiales
perpetuo neque in aeternum sepelire salutem, 570
nec porro rerum genitales auctificique
motus perpetuo possunt servare creata.
sic aequo geritur certamine principiorum
ex infinito contractum tempore bellum:
nunc hic nunc illic superant vitalia rerum 575
et superantur item. miscetur funere vagor
quem pueri tollunt visentis luminis oras;
nec nox ulla diem neque noctem aurora secutast
quae non audierit mixtos vagitibus aegris
ploratus mortis comites et funeris atri. 580

Illud in his obsignatum quoque rebus habere
convenit et memori mandatum mente tenere,
nil esse, in promptu quorum natura videtur,
quod genere ex uno consistat principiorum,
nec quicquam quod non permixto semine constet. 585
et quodcumque magis vis multas possidet in se
atque potestates, ita plurima principiorum
in sese genera ac varias docet esse figuras.
principio tellus habet in se corpora prima
unde mare inmensum volventes frigora fontes 590
adsidue renovent, habet ignes unde oriantur.
nam multis succensa locis ardent sola terrae,
eximiis vero furit ignibus impetus Aetnae.
tum porro nitidas fruges arbustaque laeta
gentibus humanis habet unde extollere possit, 595
unde etiam fluvios frondes et pabula laeta
montivago generi possit praebere ferarum.
quare magna deum mater materque ferarum
et nostri genetrix haec dicta est corporis una.

Hanc veteres Graium docti cecinere poetae 600
sedibus in curru biiugos agitare leones,
aëris in spatio magnam pendere docentes
tellurem neque posse in terra sistere terram.
adiunxere feras, quia quamvis effera proles
officiis debet molliri victa parentum. 605
muralique caput summum cinxere corona,
eximiis munita locis quia sustinet urbes;
quo nunc insigni per magnas praedita terras
horrifice fertur divinae matris imago.
hanc variae gentes antiquo more sacrorum 610
Idaeam vocitant matrem Phrygiasque catervas
dant comites, quia primum ex illis finibus edunt
per terrarum orbem fruges coepisse creari.
gallos attribuunt, quia, numen qui violarint

matris et ingrati genitoribus inventi sint, 615
significare volunt indignos esse putandos,
vivam progeniem qui in oras luminis edant.
tympana tenta tonant palmis et cymbala circum
concava, raucisonoque minantur cornua cantu,
et Phrygio stimulat numero cava tibia mentis, 620
telaque praeportant violenti signa furoris,
ingratos animos atque impia pectora volgi
conterrere metu quae possint numini' divae.
ergo cum primum magnas invecta per urbis
munificat tacita mortalis muta salute, 625
aere atque argento sternunt iter omne viarum
largifica stipe ditantes ninguntque rosarum
floribus umbrantes matrem comitumque catervas.
hic armata manus, Curetas nomine Grai
quos memorant Phrygios, inter se forte quod armis 630
ludunt in numerumque exultant sanguinolenti
terrificas capitum quatientes numine cristas,
Dictaeos referunt Curetas qui Iovis illum
vagitum in Creta quondam occultasse feruntur,
cum pueri circum puerum pernice chorea 635
armatei in numerum pulsarent aeribus aera,
ne Saturnus eum malis mandaret adeptus
aeternumque daret matri sub pectore volnus.
propterea magnam armati matrem comitantur, 640
aut quia significant divam praedicere ut armis
ac virtute velint patriam defendere terram
praesidioque parent decorique parentibus esse.
quae bene et eximie quamvis disposta ferantur,
longe sunt tamen a vera ratione repulsa. 645
omnis enim per se divom natura necessest
inmortali aevo summa cum pace fruatur
semota ab nostris rebus seiunctaque longe;
nam privata dolore omni, privata periclis,
ipsa suis pollens opibus, nil indiga nostri, 650

nec bene promeritis capitur neque tangitur ira.
hic siquis mare Neptunum Cereremque vocare
constituit fruges et Bacchi nomine abuti
mavolt quam laticis proprium proferre vocamen,
concedamus ut hic terrarum dictitet orbem 655
esse deum matrem, dum vera re tamen ipse
religione animum turpi contingere parcat.
terra quidem vero caret omni tempore sensu,
et quia multarum potitur primordia rerum,
multa modis multis effert in lumina solis. 660

Saepe itaque ex uno tondentes gramina campo
lanigerae pecudes et equorum duellica proles
buceriaeque greges eodem sub tegmine caeli
ex unoque sitim sedantes flumine aquai
dissimili vivont specie retinentque parentum 665
naturam et mores generatim quaeque imitantur.
tanta est in quovis genere herbae materiai
dissimilis ratio, tanta est in flumine quoque.
hinc porro quamvis animantem ex omnibus unam
ossa cruor venae calor umor viscera nervi 670
constituunt; quae sunt porro distantia longe,
dissimili perfecta figura principiorum.
tum porro quaecumque igni flammata cremantur,
si nil praeterea, tamen haec in corpore condunt
unde ignem iacere et lumen summittere possint 675
scintillasque agere ac late differre favillam.
cetera consimili mentis ratione peragrans
invenies igitur multarum semina rerum
corpore celare et varias cohibere figuras.
denique multa vides quibus et color et sapor una 680
reddita sunt cum odore: in primis pleraque dona
haec igitur variis debent constare figuris;
nidor enim penetrat qua fucus non it in artus,
fucus item sorsum, sorsum sapor insinuatur

sensibus; ut noscas primis differre figuris. 685
dissimiles igitur formae glomeramen in unum
conveniunt et res permixto semine constant.
quin etiam passim nostris in versibus ipsis
multa elementa vides multis communia verbis,
cum tamen inter se versus ac verba necesse est 690
confiteare alia ex aliis constare elementis;
non quo multa parum communis littera currat
aut nulla inter se duo sint ex omnibus isdem,
sed quia non volgo paria omnibus omnia constant.
sic aliis in rebus item communia multa 695
multarum rerum cum sint primordia, verum
dissimili tamen inter se consistere summa
possunt; ut merito ex aliis constare feratur
humanum genus et fruges arbustaque laeta.

Nec tamen omnimodis conecti posse putandum est 700
omnia; nam volgo fieri portenta videres,
semiferas hominum species existere et altos
interdum ramos egigni corpore vivo,
multaque conecti terrestria membra marinis,
tum flammam taetro spirantis ore Chimaeras 705
pascere naturam per terras omniparentis.
quorum nil fieri manifestum est, omnia quando
seminibus certis certa genetrice creata
conservare genus crescentia posse videmus.
scilicet id certa fieri ratione necessust. 710
nam sua cuique cibis ex omnibus intus in artus
corpore discedunt conexaque convenientis
efficiunt motus; at contra aliena videmus
reicere in terras naturam, multaque caecis
corporibus fugiunt e corpore percita plagis, 715
quae neque conecti quoquam potuere neque intus
vitalis motus consentire atque imitari.
sed ne forte putes animalia sola teneri
legibus hisce, ea res ratio disterminat omnis.

nam veluti tota natura dissimiles sunt 720
inter se genitae res quaeque, ita quamque necessest
dissimili constare figura principiorum ;
non quo multa parum simili sint praedita forma,
sed quia non volgo paria omnibus omnia constant.
semina cum porro distent, differre necessust 725
intervalla vias conexus pondera plagas
concursus motus, quae non animalia solum
corpora seiungunt, sed terras ac mare totum
secernunt caelumque a terris omne retentant.

Nunc age dicta meo dulci quaesita labore 730
percipe, ne forte haec albis ex alba rearis
principiis esse, ante oculos quae candida cernis,
aut ea quae nigrant nigro de semine nata ;
nive alium quemvis quae sunt inbuta colorem,
propterea gerere hunc credas, quod materiai 735
corpora consimili sint eius tincta colore.
nullus enim color est omnino materiai
corporibus, neque par rebus neque denique dispar.
in quae corpora si nullus tibi forte videtur
posse animi iniectus fieri, procul avius erras. 740
nam cum caecigeni, solis qui lumina numquam
dispexere, tamen cognoscant corpora tactu,
ex ineunte aevo nullo coniuncta colore,
scire licet nostrae quoque menti corpora posse
vorti in notitiam nullo circum lita fuco.
denique nos ipsi caecis quaecumque tenebris 745
tangimus, haud ullo sentimus tincta colore.
quod quoniam vinco fieri, nunc esse docebo
. . . .
omnis enim color omnino mutatur in omnis ;
quod facere haud ullo debent primordia pacto ; 750
immutabile enim quiddam superare necessest,
ne res ad nilum redigantur funditus omnes.
nam quodcumque suis mutatum finibus exit,

continuo hoc mors est illius quod fuit ante.
proinde colore cave contingas semina rerum, 755
ne tibi res redeant ad nilum funditus omnes.

Praeterea si nulla coloris principiis est
reddita natura et variis sunt praedita formis,
e quibus omne genus gignunt variantque colores
propterea, magni quod refert semina quaeque 760
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque,
perfacile extemplo rationem reddere possis
cur ea quae nigro fuerint paulo ante colore,
marmoreo fieri possint candore repente; 765
ut mare, cum magni commorunt aequora venti,
vertitur in canos candenti marmore fluctus;
dicere enim possis, nigrum quod saepe videmus,
materies ubi permixta est illius et ordo
principiis mutatus et addita demptaque quaedam, 770
continuo id fieri ut candens videatur et album.
quod si caeruleis constarent aequora ponti
seminibus, nullo possent albescere pacto;
nam quocumque modo perturbes caerula quae sint,
numquam in marmoreum possunt migrare colorem. 775
sin alio atque alio sunt semina tincta colore
quae maris efficiunt unum purumque nitorem,
ut saepe ex aliis formis variisque figuris
efficitur quiddam quadratum unaque figura,
conveniebat, ut in quadrato cernimus esse 780
dissimiles formas, ita cernere in aequore ponti
aut alio in quovis uno puroque nitore
dissimiles longe inter se variosque colores.
praeterea nil officiunt obstantque figurae
dissimiles quo quadratum minus omne sit extra; 785
at varii rerum inpediunt prohibentque colores
quominus esse uno possit res tota nitore.

Tum porro quae ducit et inlicit ut tribuamus

principiis rerum nonnumquam causa colores,
occidit, ex albis quoniam non alba creantur, 790
nec quae nigra cluent de nigris sed variis ex.
quippe etenim multo proclivius exorientur
candida de nullo quam nigro nata colore
aut alio quovis qui contra pugnet et obstet.

Praeterea quoniam nequeunt sine luce colores 795
esse neque in lucem existunt primordia rerum,
scire licet quam sint nullo velata colore.
qualis enim caecis poterit color esse tenebris?
lumine quin ipso mutatur propterea quod
recta aut obliqua percussus luce refulget; 800
pluma columbarum quo pacto in sole videtur,
quae sita cervices circum collumque coronat;
namque alias fit uti claro sit rubra pyropo,
interdum quodam sensu fit uti videatur
inter curalium viridis miscere zmaragdos. 805
caudaque pavonis, larga cum luce repleta est,
consimili mutat ratione obversa colores;
qui quoniam quodam gignuntur luminis ictu,
scire licet, sine eo fieri non posse putandum est.
et quoniam plagae quoddam genus excipit in se 810
pupula, cum sentire colorem dicitur album,
atque aliud porro, nigrum cum et cetera sentit,
nec refert ea quae tangas quo forte colore
praedita sint, verum quali magis apta figura,
scire licet nil principiis opus esse colores 815
sed variis formis variantes edere tactus.

Praeterea quoniam non certis certa figuris
est natura coloris et omnia principiorum
formamenta queunt in quovis esse nitore,
cur ea quae constant ex illis non pariter sunt 820
omne genus perfusa coloribus in genere omni?
conveniebat enim corvos quoque saepe volantis
ex albis album pinnis iactare colorem

et nigros fieri nigro de semine cycnos
aut alio quovis uno varioque colore. 825
Quin etiam quanto in partes res quaeque minutas
distrahitur magis, hoc magis est ut cernere possis
evanescere paulatim stinguique colorem;
ut fit ubi in parvas partis discerpitur austrum:
purpura poeniceusque color clarrissimu' multo, 830
filatim cum distractum est, dispergitur omnis;
noscere ut hinc possis prius omnem efflare colorem
particulas quam discedant ad semina rerum.
Postremo quoniam non omnia corpora vocem
mittere concedis neque odorem, propterea fit 835
ut non omnibus adtribuas sonitus et odores.
sic oculis quoniam non omnia cernere quimus,
scire licet quaedam tam constare orba colore
quam sine odore ullo quaedam sonituque remota,
nec minus haec animum cognoscere posse sagacem 840
quam quae sunt aliis rebus privata notare.
Sed ne forte putes solo spoliata colore
corpora prima manere, etiam secreta teporis
sunt ac frigoris omnino calidique vaporis,
et sonitu sterila et suco ieiuna feruntur, 845
nec iaciunt ullum proprium de corpore odorem.
sicut amaracini blandum stactaeque liquorem
et nardi florem, nectar qui naribus halat,
cum facere instituas, cum primis quaerere par est,
quoad licet ac possis reperire, inolentis olivi 850
naturam, nullam quae mittat naribus auram,
quam minime ut possit mixtos in corpore odores
concoctosque suo contractans perdere viro,
propter eandem rem debent primordia rerum
non adhibere suum gignundis rebus odorem 855
nec sonitum, quoniam nil ab se mittere possunt,
nec simili ratione saporem denique quemquam
nec frigus neque item calidum tepidumque vaporem,

cetera; quae cum ita sunt tamen ut mortalia constent,
molli lenta, fragosa putri, cava corpore raro,
omnia sint a principiis seiuncta necessest,
inmortalia si volumus subiungere rebus
fundamenta quibus nitatur summa salutis;
ne tibi res redeant ad nilum funditus omnes.

Nunc ea quae sentire videmus cumque necessest 865
ex insensilibus tamen omnia confiteare
principiis constare. neque id manufesta refutant
nec contra pugnant, in promptu cognita quae sunt,
sed magis ipsa manu ducunt et credere cogunt
ex insensilibus, quod dico, animalia gigni. 870
quippe videre licet vivos existere vermes
stercore de taetro, putorem cum sibi nacta est
intempestivis ex imbribus umida tellus;
praeterea cunctas itidem res vertere sese.
vertunt se fluvii frondes et pabula laeta 875
in pecudes, vertunt pecudes in corpora nostra
naturam, et nostro de corpore saepe ferarum
augescunt vires et corpora pennipotentum.
ergo omnes natura cibos in corpora viva
vertit et hinc sensus animantum procreat omnes, 880
non alia longe ratione adque arida ligna
explicat in flammas et in ignis omnia versat.
iamne vides igitur magni primordia rerum
referre in quali sint ordine quaeque locata
et commixta quibus dent motus accipiantque? 885

Tum porro quid id est, animum quod percutit, ipsum
quod movet et varios sensus expromere cogit,
ex insensilibus ne credas sensile gigni?
nimirum lapides et ligna et terra quod una
mixta tamen nequeunt vitalem reddere sensum. 890
illud in his igitur rebus meminisse decebit,
non ex omnibus omnino, quaecumque creant res,
sensile et extemplo me gigni dicere sensus,

sed magni referre ea primum quantula constent,
sensile quae faciunt, et qua sint praedita forma, 895
motibus ordinibus posituris denique quae sint.
quarum nil rerum in lignis glaebisque videmus;
et tamen haec, cum sunt quasi putrefacta per imbres,
vermiculos pariunt, quia corpora materiai
antiquis ex ordinibus permota nova re 900
conciliantur ita ut debent animalia gigni.
deinde e sensilibus qui sensile posse creari
constituunt, porro ex aliis sentire suëti
mollia cum faciunt. nam sensus iungitur omnis
visceribus nervis venis, quae cuique videmus 905
mollia mortali consistere corpore creta.
sed tamen esto iam posse haec aeterna manere:
nempe tamen debent aut sensum partis habere
aut simili totis animalibus esse putari.
at nequeant per se partes sentire necesse est; 910
namque alio sensus membrorum respicit omnis,
nec manus a nobis potis est secreta neque ulla
corporis omnino sensum pars sola tenere.
linquitur ut totis animantibus adsimulentur.
sic itidem quae sentimus sentire necessest, 915
vitali ut possint consentire undique sensu.
qui poterunt igitur rerum primordia dici
et leti vitare vias, animalia cum sint,
adque animalia sint mortalibus una eademque?
quod tamen ut possint, at coetu concilioque 920
nil facient praeter volgum turbamque animantum,
scilicet ut nequeant homines armenta feraeque
inter sese ullam rem gignere conveniundo.
quod si forte suum dimittunt corpore sensum
atque alium capiunt, quid opus fuit adtribui id quod 925
detrahitur? tum praeterea, quo fugimus ante,
quatenus in pullos animalis vertier ova

cernimus alituum vermisque effervere, terram
intempestivos quom putor cepit ob imbris,
scire licet gigni posse ex non sensibu' sensus. 930

Quod si forte aliquis dicet dumtaxat oriri
posse a non sensu sensum mutabilitate,
aut aliquo tamquam partu quod proditus extet,
huic satis illud erit planum facere atque probare
non fieri partum nisi concilio ante coacto 935
nec quicquam commutari sine conciliatu.
principio nequeunt ullius corporis esse
sensus ante ipsam genitam naturam animantis,
nimirum quia materies disiecta tenetur
aëre fluminibus terris terraque creatis, 940
nec congressa modo vitalis convenienti
contulit inter se motus, quibus omnituentes
accensi sensus animante in quaque cientur.

Praeterea quamvis animantem grandior ictus,
quam patitur natura, repente adfligit et omnis 945
corporis atque animi pergit confundere sensus.
dissoluuntur enim positurae principiorum
et penitus motus vitales inpediuntur,
donec materies, omnis concussa per artus,
vitalis animae nodos a corpore solvit 950
dispersamque foras per caulas eiecit omnis.
nam quid praeterea facere ictum posse reamur
oblatum, nisi discutere ac dissolvere quaeque?
fit quoque uti soleant minus oblato acriter ictu
reliqüi motus vitalis vincere saepe, 955
vincere, et ingentis plagae sedare tumultus
inque suos quicquid rursus revocare meatus
et quasi iam leti dominantem in corpore motum
discutere ac paene amissos accendere sensus.
nam qua re potius leti iam limine ab ipso 960
ad vitam possit conlecta mente reverti,
quam quo decursum prope iam siet ire et abire?

Praeterea quoniam dolor est ubi materiai
corpora vi quadam per viscera viva per artus
sollicitata suis trepidant in sedibus intus, 965
inque locum quando remigrant, fit blanda voluptas,
scire licet nullo primordia posse dolore
temptari nullamque voluptatem capere ex se;
quandoquidem non sunt ex ullis principiorum
corporibus, quorum motus novitate laborent 970
aut aliquem fructum capiant dulcedinis almae,
haut igitur debent esse ullo praedita sensu.

Denique uti possint sentire animalia quaeque,
principiis si iam est sensus tribuendus eorum,
quid, genus humanum propritim de quibu' factumst? 975
scilicet et risu tremulo concussa cachinnant
et lacrimis spargunt rorantibus ora genasque
multaque de rerum mixtura dicere callent
et sibi proporro quae sint primordia quaerunt;
quandoquidem totis mortalibus adsimulata 980
ipsa quoque ex aliis debent constare elementis,
inde alia ex aliis, nusquam consistere ut ausis:
quippe sequar, quodcumque loqui ridereque dices
et sapere, ex aliis eadem haec facientibus ut sit.
quod si delira haec furiosaque cernimus esse 985
et ridere potest non ex ridentibu' factus
et sapere et doctis rationem reddere dictis
non ex seminibus sapientibus atque disertis,
qui minus esse queant ea quae sentire videmus
seminibus permixta carentibus undique sensu? 990

Denique caelesti sumus omnes semine oriundi;
omnibus ille idem pater est, unde alma liquentis
umoris guttas mater cum terra recepit,
feta parit nitidas fruges arbustaque laeta
et genus humanum, parit omnia saecla ferarum, 995
pabula cum praebet quibus omnes corpora pascunt
et dulcem ducunt vitam prolemque propagant;

quapropter merito maternum nomen adepta est.
cedit item retro, de terra quod fuit ante,
in terras, et quod missumst ex aetheris oris, 1000
id rursum caeli rellatum templa receptant.
nec sic interemit mors res ut materiai
corpora conficiat, sed coetum dissupat ollis,
inde aliis aliud coniungit; et effit ut omnes
res ita convertant formas mutentque colores 1005
et capiant sensus et puncto tempore reddant;
ut noscas referre eadem primordia rerum
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque,
neve putes aeterna penes residere potesse 1010
corpora prima quod in summis fluitare videmus
rebus et interdum nasci subitoque perire.
quin etiam refert nostris in versibus ipsis
cum quibus et quali sint ordine quaeque locata.
si non omnia sunt, at multo maxima pars est 1017
consimilis; verum positura discrepitant res.
sic ipsis in rebus item iam materiai
concursus motus ordo positura figurae 1021
cum permutantur, mutari res quoque debent.
  Nunc animum nobis adhibe veram ad rationem.
nam tibi vementer nova res molitur ad auris
accedere et nova se species ostendere rerum. 1025
sed neque tam facilis res ulla est quin ea primum
difficilis magis ad credendum constet, itemque
nil adeo magnum neque tam mirabile quicquam,
quod non paulatim mittant mirarier omnes.
suspicito coeli clarum purumque colorem, 1030
quaeque in se cohibet, palantia sidera passim,
lunamque et solis praeclara luce nitorem;
omnia quae nunc si primum mortalibus essent,
ex inproviso si nunc obiecta repente,
quid magis his rebus poterat mirabile dici 1035

aut minus ante quod auderent fore credere gentes?
nil, ut opinor: ita haec species miranda fuisset.
quam tibi iam nemo, fessus satiate videndi,
suspicere in caeli dignatur lucida templa!
desine quapropter novitate exterritus ipsa 1040
expuere ex animo rationem, sed magis acri
iudicio perpende et, si tibi vera videntur,
dede manus, aut, si falsum est, accingere contra.
quaerit enim rationem animus, cum summa loci sit
infinita foris haec extra moenia mundi, 1045
quid sit ibi porro quo prospicere usque velit mens
atque animi iactus liber quo pervolet ipse.
Principio nobis in cunctas undique partis
et latere ex utroque supra supterque per omne
nulla est finis; uti docui, res ipsaque per se 1050
vociferatur, et elucet natura profundi.
nullo iam pacto veri simile esse putandumst,
undique cum vorsum spatium vacet infinitum
seminaque innumero numero summaque profunda
multimodis volitent aeterno percita motu, 1055
hunc unum terrarum orbem caelumque creatum,
nil agere illa foris tot corpora materiai;
cum praesertim hic sit natura factus, ut ipsa
sponte sua forte offensando semina rerum,
multimodis temere in cassum frustraque coacta 1060
tandem colarunt ea quae coniecta repente
magnarum rerum fierent exordia semper,
terrai maris et caeli generisque animantum.
quare etiam atque etiam talis fateare necesse est
esse alios alibi congressus materiai, 1065
qualis hic est, avido complexu quem tenet aether.
Praeterea cum materies est multa parata,
cum locus est praesto nec res nec causa moratur
ulla, geri debent nimirum et confieri res.
nunc et seminibus si tanta est copia quantam 1070

enumerare aetas animantum non queat omnis,
visque eadem et natura manet quae semina rerum
conicere in loca quaeque queat simili ratione
atque huc sunt coniecta, necesse est confiteare
esse alios aliis terrarum in partibus orbis 1075
et varias hominum gentis et saecla ferarum.

Huc accedit ut in summa res nulla sit una,
unica quae gignatur et unica solaque crescat,
quin aliquoiu' siet saecli permultaque eodem
sint genere. in primis animalibus, inclute Memmi, 1080
invenies sic montivagum genus esse ferarum,
sic hominum genitam prolem, sic denique mutas
squamigerum pecudes et corpora cuncta volantum.
quaepropter caelum simili ratione fatendumst
terramque et solem lunam mare, cetera quae sunt, 1085
non esse unica, sed numero magis innumerali;
quandoquidem vitae depactus terminus alte
tam manet haec et tam nativo corpore constant,
quam genus omne quod hic generatimst rebus abundans.

Quae bene cognita si teneas, natura videtur 1090
libera continuo dominis privata superbis
ipsa sua per se sponte omnia dis agere expers.
nam pro sancta deum tranquilla pectora pace
quae placidum degunt aevom vitamque serenam,
quis regere immensi summam, quis habere profundi 1095
indu manu validas potis est moderanter habenas,
quis pariter caelos omnis convertere et omnis
ignibus aetheriis terras suffire feracis,
omnibus inve locis esse omni tempore praesto,
nubibus ut tenebras faciat caelique serena 1100
concutiat sonitu, tum fulmina mittat et aedis
saepe suas disturbet et in deserta recedens
saeviat exercens telum quod saepe nocentes
praeterit exanimatque indignos inque merentes?

Multaque post mundi tempus genitale diemque 1105

primigenum maris et terrae solisque coortum
addita corpora sunt extrinsecus, addita circum
semina quae magnum iaculando contulit omne;
unde mare et terrae possent augescere et unde
appareret spatium caeli domus altaque tecta 1110
tolleret a terris procul et consurgeret aër.
nam sua cuique locis ex omnibus omnia plagis
corpora distribuuntur et ad sua saecla recedunt,
umor ad umorem, terreno corpore terra
crescit et ignem ignes procudunt aetheraque aether,
donique ad extremam crescendi perfica finem 1116
omnia perduxit rerum natura creatrix;
ut fit ubi nilo iam plus est quod datur intra
vitalis venas quam quod fluit adque recedit.
omnibus hic aetas debet consistere rebus, 1120
hic natura suis refrenat viribus auctum.
nam quaecumque vides hilaro grandescere adauctu
paulatimque gradus aetatis scandere adultae,
plura sibi adsumunt quam de se corpora mittunt,
dum facile in venas cibus omnis inditur et dum 1125
non ita sunt late dispersa ut multa remittant
et plus dispendi faciant quam vescitur aetas.
nam certe fluere adque recedere corpora rebus
multa manus dandum est; sed plura accedere debent,
donec alescendi summum tetigere cacumen. 1130
inde minutatim vires et robur adultum
frangit et in partem peiorem liquitur aetas.
quippe etenim quanto est res amplior, augmine adempto,
et quo latior est, in cunctas undique partis
plura modo dispargit et ab se corpora mittit, 1135
nec facile in venas cibus omnis diditur ei
nec satis est, proquam largos exaestuat aestus,
unde queat tantum suboriri ac subpeditare.
omnia debet enim cibus integrare novando
et fulcire cibus, cibus omnia sustentare, 1140

nequiquam, quoniam nec venae perpetiuntur
quod satis est neque quantum opus est natura ministrat.
iure igitur pereunt, cum rarefacta fluendo
sunt et cum externis succumbunt omnia plagis,
quandoquidem grandi cibus aevo denique defit 1145
nec tuditantia rem cessant extrinsecus ullam
corpora conficere et plagis infesta domare.
sic igitur magni quoque circum moenia mundi
expugnata dabunt labem putrisque ruinas.
iamque adeo fracta est aetas effetaque tellus 1150
vix animalia parva creat quae cuncta creavit
saecla deditque ferarum ingentia corpora partu.
haud, ut opinor, enim mortalia saecla superne
aurea de caelo demisit funis in arva
nec mare nec fluctus plangentis saxa crearunt, 1155
sed genuit tellus eadem quae nunc alit ex se.
praeterea nitidas fruges vinetaque laeta
sponte sua primum mortalibus ipsa creavit,
ipsa dedit dulcis fetus et pabula laeta;
quae nunc vix nostro grandescunt aucta labore, 1160
conterimusque boves et viris agricolarum,
conficimus ferrum vix arvis suppeditati:
usque adeo parcunt fetus augentque labore.
iamque caput quassans grandis suspirat arator
crebrius, incassum manuum cecidisse labores, 1165
et cum tempora temporibus praesentia confert
praeteritis, laudat fortunas saepe parentis
et crepat, anticum genus ut pietate repletum
perfacile angustis tolerarit finibus aevom,
cum minor esset agri multo modus ante viritim. 1170
tristis item vetulae vitis sator atque vietae
temporis incusat momen caelumque fatigat
nec tenet omnia paulatim tabescere et ire
ad capulum spatio aetatis defessa vetusto.

T. LUCRETI CARI

DE RERUM NATURA

LIBER TERTIUS.

E tenebris tantis tam clarum extollere lumen
qui primus potuisti inlustrans commoda vitae,
te sequor, o Graiae gentis decus, inque tuis nunc
ficta pedum pono pressis vestigia signis,
non ita certandi cupidus quam propter amorem 5
quod te imitari aveo; quid enim contendat hirundo
cycnis, aut quidnam tremulis facere artubus haedi
consimile in cursu possint et fortis equi vis?
tu, pater, es rerum inventor, tu patria nobis
suppeditas praecepta, tuisque ex, inclute, chartis, 10
floriferis ut apes in saltibus omnia libant,
omnia nos itidem depascimur aurea dicta,
aurea, perpetua semper dignissima vita.
nam simul ac ratio tua coepit vociferari
naturam rerum, divina mente coorta, 15
diffugiunt animi terrores, moenia mundi
discedunt, totum video per inane geri res.
apparet divum numen sedesque quietae
quas neque concutiunt venti nec nubila nimbis
aspergunt neque nix acri concreta pruina 20
cana cadens violat semperque innubilus aether
integit, et large diffuso lumine rident.
omnia suppeditat porro natura neque ulla

res animi pacem delibat tempore in ullo.
at contra nusquam apparent Acherusia templa 25
nec tellus obstat quin omnia dispiciantur,
sub pedibus quaecumque infra per inane geruntur.
his ibi me rebus quaedam divina voluptas
percipit adque horror, quod sic natura tua vi
tam manifesta patens ex omni parte retecta est. 30

Et quoniam docui, cunctarum exordia rerum
qualia sint et quam variis distantia formis
sponte sua volitent aeterno percita motu
quove modo possint res ex his quaeque creari,
hasce secundum res animi natura videtur 35
atque animae claranda meis iam versibus esse
et metus ille foras praeceps Acheruntis agendus,
funditus humanam qui vitam turbat ab imo
omnia suffundens mortis nigrore neque ullam
esse voluptatem liquidam puramque relinquit. 40
nam quod saepe homines morbos magis esse timendos
infamemque ferunt vitam quam Tartara leti
et se scire animae naturam sanguinis esse
aut etiam venti, si fert ita forte voluntas,
nec prosum quicquam nostrae rationis egere, 45
hinc licet advertas animum magis omnia laudis
iactari causa quam quod res ipsa probetur.
extorres idem patria longeque fugati
conspectu ex hominum, foedati crimine turpi,
omnibus aerumnis adfecti denique vivunt, 50
et quocumque tamen miseri venere parentant
et nigras mactant pecudes et manibu' divis
inferias mittunt multoque in rebus acerbis
acrius advertunt animos ad religionem.
quo magis in dubiis hominem spectare periclis 55
convenit adversisque in rebus noscere qui sit;
nam verae voces tum demum pectore ab imo
eiciuntur et eripitur persona, manet res.

denique avarities et honorum caeca cupido
quae miseros homines cogunt transcendere fines 60
iuris et interdum socios scelerum atque ministros
noctes atque dies niti praestante labore
ad summas emergere opes, haec vulnera vitae
non minimam partem mortis formidine aluntur.
turpis enim ferme contemptus et acris egestas 65
semota ab dulci vita stabilique videntur
et quasi iam leti portas cunctarier ante;
unde homines dum se falso terrore coacti
effugisse volunt longe longeque remosse,
sanguine civili rem conflant divitiasque 70
conduplicant avidi, caedem caede accumulantes;
crudeles gaudent in tristi funere fratris
et consanguineum mensas odere timentque.
consimili ratione ab eodem saepe timore
macerat invidia. ante oculos illum esse potentem, 75
illum aspectari, claro qui incedit honore,
ipsi se in tenebris volvi caenoque queruntur.
intereunt partim statuarum et nominis ergo.
et saepe usque adeo, mortis formidine, vitae
percipit humanos odium lucisque videndae, 80
ut sibi consciscant maerenti pectore letum
obliti fontem curarum hunc esse timorem,
hunc vexare pudorem, hunc vincula amicitiai
rumpere et in summa pietatem evertere suadet;
nam iam saepe homines patriam carosque parentis 85
prodiderunt, vitare Acherusia templa petentes.
nam veluti pueri trepidant atque omnia caecis
in tenebris metuunt, sic nos in luce timemus
interdum, nilo quae sunt metuenda magis quam
quae pueri in tenebris pavitant finguntque futura. 90
hunc igitur terrorem animi tenebrasque necessest
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.

Primum animum dico, mentem quam saepe vocamus,
in quo consilium vitae regimenque locatum est, 95
esse hominis partem nilo minus ac manus et pes
atque oculei partes animantis totius extant.
. . .
sensum animi certa non esse in parte locatum,
verum habitum quendam vitalem corporis esse,
harmoniam Grai quam dicunt, quod faciat nos 100
vivere cum sensu, nulla cum in parte siet mens;
ut bona saepe valetudo cum dicitur esse
corporis, et non est tamen haec pars ulla valentis.
sic animi sensum non certa parte reponunt;
magno opere in quo mi diversi errare videntur. 105
saepe itaque, in promptu corpus quod cernitur, aegret,
cum tamen ex alia laetamur parte latenti;
et retro fit uti contra sit saepe vicissim,
cum miser ex animo laetatur corpore toto;
non alio pacto quam si, pes cum dolet aegri, 110
in nullo caput interea sit forte dolore.
praeterea molli cum somno dedita membra
effusumque iacet sine sensu corpus honustum,
est aliud tamen in nobis quod tempore in illo
multimodis agitatur et omnis accipit in se 115
laetitiae motus et curas cordis inanis.
nunc animam quoque ut in membris cognoscere possis
esse neque harmonia corpus sentire solere,
principio fit uti detracto corpore multo
saepe tamen nobis in membris vita moretur; 120
atque eadem rursum, cum corpora pauca caloris
diffugere forasque per os est editus aër,
deserit extemplo venas atque ossa relinquit;
noscere ut hinc possis non aequas omnia partis
corpora habere neque ex aequo fulcire salutem, 125
sed magis haec, venti quae sunt calidique vaporis
semina, curare in membris ut vita moretur.

est igitur calor ac ventus vitalis in ipso
corpore qui nobis moribundos deserit artus.
quapropter quoniam est animi natura reperta 130
atque animae quasi pars hominis, redde harmoniai
nomen, ad organicos alto delatum Heliconi;
sive aliunde ipsi porro traxere et in illam
transtulerunt, proprio quae tum res nomine egebat.
quidquid id est, habeant: tu cetera percipe dicta. 135

Nunc animum atque animam dico coniuncta teneri
inter se atque unam naturam conficere ex se,
sed caput esse quasi et dominari in corpore toto
consilium quod nos animum mentemque vocamus.
idque situm media regione in pectoris haeret. 140
hic exultat enim pavor ac metus, haec loca circum
laetitiae mulcent; hic ergo mens animusquest.
cetera pars animae per totum dissita corpus
paret et ad numen mentis momenque movetur.
idque sibi solum per se sapit, id sibi gaudet, 145
cum neque res animam neque corpus commovet una.
et quasi, cum caput aut oculus temptante dolore
laeditur in nobis, non omni concruciamur
corpore, sic animus nonnumquam laeditur ipse
laetitiaque viget, cum cetera pars animai 150
per membra atque artus nulla novitate cietur.
verum ubi vementi magis est commota metu mens,
consentire animam totam per membra videmus
sudoresque ita pallorémque existere toto
corpore et infringi linguam vocemque aboriri, 155
caligare oculos, sonere auris, succidere artus,
denique concidere ex animi terrore videmus
saepe homines; facile ut quivis hinc noscere possit
esse animam cum animo coniunctam, quae cum animi vi
percussast, exim corpus propellit et icit. 160

Haec eadem ratio naturam animi atque animai
corpoream docet esse; ubi enim propellere membra,

corripere ex somno corpus mutareque vultum
atque hominem totum regere ac versare videtur,
quorum nil fieri sine tactu posse videmus 165
nec tactum porro sine corpore, nonne fatendumst
corporea natura animum constare animamque?
praeterea pariter fungi cum corpore et una
consentire animum nobis in corpore cernis.
si minus offendit vitam vis horrida teli 170
ossibus ac nervis disclusis intus adacta,
at tamen insequitur languor terraeque petitus
segnis, et in terra mentis qui gignitur aestus,
interdumque quasi exurgendi incerta voluntas.
ergo corpoream naturam animi esse necessest, 175
corporeis quoniam telis ictuque laborat.

Is tibi nunc animus quali sit corpore et unde
constiterit pergam rationem reddere dictis.
principio esse aio persuptilem atque minutis
perquam corporibus factum constare. id ita esse 180
hinc licet advertas animum ut pernoscere possis:
nil adeo fieri celeri ratione videtur,
quam sibi mens fieri proponit et inchoat ipsa;
ocius ergo animus quam res se perciet ulla,
ante oculos quorum in promptu natura videtur. 185
at quod mobile tanto operest, constare rutundis
perquam seminibus debet perquamque minutis,
momine uti parvo possint inpulsa moveri.
namque movetur aqua et tantillo momine flutat
quippe volubilibus parvisque creata figuris. 190
at contra mellis constantior est natura
et pigri latices magis et cunctantior actus;
haeret enim inter se magis omnis materiai
copia, nimirum quia non tam levibus extat
corporibus neque tam subtilibus atque rutundis. 195
namque papaveris aura potest suspensa levisque
cogere ut ab summo tibi diffluat altus acervus;

at contra lapidum conlectum ipse euru' movere
noenu potest. igitur parvissima corpora proquam
et levissima sunt, ita mobilitate fruuntur; 200
at contra quaecumque magis cum pondere magno
asperaque inveniuntur, eo stabilita magis sunt.
nunc igitur quoniam est animi natura reperta
mobilis egregie, perquam constare necessest
corporibus parvis et levibus atque rutundis. 205
quae tibi cognita res in multis, o bone, rebus
utilis invenietur et opportuna cluebit.
haec quoque res etiam naturam dedicat eius,
quam tenui constet textura quamque loco se
contineat parvo, si possit conglomerari, 210
quod simul atque hominem leti secura quies est
indepta atque animi natura animaeque recessit,
nil ibi libatum de toto corpore cernas
ad speciem, nil ad pondus: mors omnia praestat
vitalem praeter sensum calidumque vaporem. 215
ergo animam totam perparvis esse necessest
seminibus, nexam per venas viscera nervos;
quatenus, omnis ubi e toto iam corpore cessit,
extima membrorum circumcaesura tamen se
incolumem praestat nec defit ponderis hilum. 220
quod genus est Bacchi cum flos evanuit aut cum
spiritus unguenti suavis diffugit in auras
aut aliquo cum iam sucus de corpore cessit;
nil oculis tamen esse minor res ipsa videtur
propterea neque detractum de pondere quicquam, 225
nimirum quia multa minutaque semina sucos
efficiunt et odorem in toto corpore rerum.
quare etiam atque etiam mentis naturam animaeque
scire licet perquam pauxillis esse creatam
seminibus, quoniam fugiens nil ponderis aufert. 230

Nec tamen haec simplex nobis natura putanda est.
tenvis enim quaedam moribundos deserit aura

mixta vapore, vapor porro trahit aëra secum.
nec calor est quisquam, cui non sit mixtus et aër;
rara quod eius enim constat natura, necessest 235
aëris inter eum primordia multa moveri.
iam triplex animi est igitur natura reperta;
nec tamen haec sat sunt ad sensum cuncta creandum,
nil horum quoniam recepit res posse creare
sensiferos motus et homo quae mente volutat. 240
quarta quoque his igitur quaedam natura necessest
adtribuatur; east omnino nominis expers;
qua neque mobilius quicquam neque tenvius exstat,
nec magis e parvis et levibus est elementis;
sensiferos motus quae didit prima per artus. 245
prima cietur enim, parvis perfecta figuris;
inde calor motus et venti caeca potestas
accipit, inde aër; inde omnia mobilitantur,
concutitur sanguis, tum viscera persentiscunt
omnia, postremis datur ossibus atque medullis 250
sive voluptas est sive est contrarius ardor.
nec temere huc dolor usque potest penetrare neque acre
permanare malum, quin omnia perturbentur
usque adeo ut vitae desit locus atque animai
diffugiant partes per caulas corporis omnis. 255
sed plerumque fit in summo quasi corpore finis
motibus: hanc ob rem vitam retinere valemus.

Nunc ea quo pacto inter sese mixta quibusque
compta modis vigeant rationem reddere aventem
abstrahit invitum patrii sermonis egestas; 260
sed tamen, ut potero, summatim, attingere, tangam.
inter enim cursant primordia principiorum
motibus inter se, nil ut secernier unum
possit nec spatio fieri divisa potestas,
sed quasi multae vis unius corporis extant. 265
quod genus in quovis animantum viscere volgo
est odor et quidam color et sapor, et tamen ex his

omnibus est unum perfectum corporis augmen.
sic calor atque aër et venti caeca potestas
mixta creant unam naturam et mobilis illa 270
vis, initum motus ab se quae dividit ollis,
sensifer unde oritur primum per viscera motus.
nam penitus prorsum latet haec natura subestque
nec magis hac infra quicquam est in corpore nostro
atque anima est animae proporro totius ipsa. 275
quod genus in nostris membris et corpore toto
mixta latens animi vis est animaeque potestas,
corporibus quia de parvis paucisque creatast.
sic tibi nominis haec expers vis facta minutis
corporibus latet atque animae quasi totius ipsa 280
proporrost anima et dominatur corpore toto.
consimili ratione necessest ventus et aër
et calor inter se vigeant commixta per artus
adque aliis aliud subsit magis emineatque
ut quiddam fieri videatur ab omnibus unum, 285
ni calor ac ventus seorsum seorsumque potestas
aëris interemant sensum diductaque solvant.
est etenim calor ille animo, quem sumit, in ira
cum fervescit et ex oculis micat acribus ardor;
est et frigida multa comes formidinis aura 290
quae ciet horrorem membris et concitat artus;
est etiam quoque pacati status aëris ille,
pectore tranquillo fit qui voltuque sereno.
sed calidi plus est illis quibus acria corda
iracundaque mens facile effervescit in ira. 295
quo genere in primis vis est violenta leonum,
pectora qui fremitu rumpunt plerumque gementes
nec capere irarum fluctus in pectore possunt.
at ventosa magis cervorum frigida mens est
et gelidas citius per viscera concitat auras 300
quae tremulum faciunt membris existere motum.
at natura boum placido magis aëre vivit,

nec nimis irai fax umquam subdita percit
fumida, suffundens caecae caliginis umbra,
nec gelidis torpet telis perfixa pavoris: 305
inter utrosque sitast, cervos saevosque leones.
sic hominum genus est. quamvis doctrina politos
constituat pariter quosdam, tamen illa relinquit
naturae cuiusque animi vestigia prima.
nec radicitus evelli mala posse putandumst, 310
quin proclivius hic iras decurrat ad acris,
ille metu citius paulo temptetur, at ille
tertius accipiat quaedam clementius aequo.
inque aliis rebus multis differre necessest
naturas hominum varias moresque sequacis; 315
quorum ego nunc nequeo caecas exponere causas
nec reperire figurarum tot nomina quot sunt
principiis, unde haec oritur variantia rerum.
illud in his rebus videor firmare potesse,
usque adeo naturarum vestigia linqui 320
parvola quae nequeat ratio depellere nobis,
ut nil inpediat dignam dis degere vitam.

Haec igitur natura tenetur corpore ab omni
ipsaque corporis est custos et causa salutis;
nam communibus inter se radicibus haerent 325
nec sine pernicie divelli posse videntur.
quod genus e thuris glaebis evellere odorem
haud facile est quin intereat natura quoque eius.
sic animi atque animae naturam corpore toto
extrahere haut facile est quin omnia dissoluantur. 330
inplexis ita principiis ab origine prima
inter se fiunt consorti praedita vita,
nec sibi quaeque sine alterius vi posse videtur
corporis atque animi seorsum sentire potestas,
sed communibus inter eas conflatur utrimque 335
motibus accensus nobis per viscera sensus.
praeterea corpus per se nec gignitur umquam

nec crescit neque post mortem durare videtur.
non enim, ut umor aquae dimittit saepe vaporem
qui datus est, neque ea causa convellitur ipse, 340
sed manet incolumis, non, inquam, sic animai
discidium possunt artus perferre relicti,
sed penitus pereunt convulsi conque putrescunt.
ex ineunte aevo sic corporis atque animai
mutua vitalis discunt contagia motus 345
maternis etiam membris alvoque reposta,
discidium ut nequeat fieri sine peste maloque;
ut videas, quoniam coniunctast causa salutis,
coniunctam quoque naturam consistere eorum.

Quod superest, siquis corpus sentire refutat 350
atque animam credit permixtam corpore toto
suscipere hunc motum quem sensum nominitamus,
vel manifestas res contra verasque repugnat.
quid sit enim corpus sentire quis adferet umquam,
si non ipsa palam quod res dedit ac docuit nos? 355
at dimissa anima corpus caret undique sensu;
perdit enim quod non proprium fuit eius in aevo;
multaque praeterea perdit quam expellitur ante.

Dicere porro oculos nullam rem cernere posse,
sed per eos animum ut foribus spectare reclusis, 360
difficilest, contra cum sensus dicat eorum:
sensus enim trahit atque acies detrudit ad ipsas;
fulgida praesertim cum cernere saepe nequimus,
lumina luminibus quia nobis praepediuntur.
quod foribus non fit; neque enim, quia cernimus ipsi, 365
ostia suscipiunt ullum reclusa laborem.
praeterea si pro foribus sunt lumina nostra,
iam magis exemptis oculis debere videtur
cernere res animus sublatis postibus ipsis.

Illud in his rebus nequaquam sumere possis, 370
Democriti quod sancta viri sententia ponit,
corporis atque animi primordia singula privis

adposita alternis variare, ac nectere membra.
nam cum multo sunt animae elementa minora
quam quibus e corpus nobis et viscera constant, 375
tum numero quoque concedunt et rara per artus
dissita sunt dumtaxat; ut hoc promittere possis,
quantula prima queant nobis iniecta ciere
corpora sensiferos motus in corpore, tanta
intervalla tenere exordia prima animai. 380
nam neque pulveris interdum sentimus adhaesum
corpore nec membris incussam sidere cretam,
nec nebulam noctu neque aranei tenvia fila
obvia sentimus, quando obretimur euntes,
nec supera caput eiusdem cecidisse vietam 385
vestem nec plumas avium papposque volantis
qui nimia levitate cadunt plerumque gravatim,
nec repentis itum cuiusviscumque animantis
sentimus nec priva pedum vestigia quaeque,
corpore quae in nostro culices et cetera ponunt. 390
usque adeo prius est in nobis multa ciendum
quam primordia sentiscant concussa animai
semina corporibus nostris inmixta per artus,
et quam in his intervallis tuditantia possint
concursare coire et dissultare vicissim. 395

Et magis est animus vitai claustra coercens
et dominantior ad vitam quam vis animai.
nam sine mente animoque nequit residere per artus
temporis exiguam partem pars ulla animai,
sed comes insequitur facile et discedit in auras 400
et gelidos artus in leti frigore linquit.
at manet in vita cui mens animusque remansit.
quamvis est circum caesis lacer undique membris
truncus, adempta anima circum membrisque remota
vivit et aetherias vitalis suscipit auras. 405
si non omnimodis, at magna parte animai
privatus, tamen in vita cunctatur et haeret;

ut, lacerato oculo circum si pupula mansit
incolumis, stat cernundi vivata potestas,
dummodo ne totum corrumpas luminis orbem 410
et circum caedas aciem solamque relinquas;
id quoque enim sine pernicie non fiet et orbei.
at si tantula pars oculi media illa peresa est,
occidit extemplo lumen tenebraeque secuntur,
incolumis quamvis aliquoi sit splendidus orbis. 415
hoc anima atque animus vincti sunt foedere semper.

Nunc age, nativos animantibus et mortalis
esse animos animasque levis ut noscere possis,
conquisita diu dulcique reperta labore
digna tua pergam disponere carmina cura. 420
tu fac utrumque uno sub iungas nomine eorum,
atque animam verbi causa cum dicere pergam,
mortalem esse docens, animum quoque dicere credas,
quatenus est unum inter se coniunctaque res est.
principio quoniam tenuem constare minutis 425
corporibus docui multoque minoribus esse
principiis factam quam liquidus umor aquai
aut nebula aut fumus: — nam longe mobilitate
praestat et a tenui causa magis icta movetur;
quippe ubi imaginibus fumi nebulaeque movetur: 430
quod genus in somnis sopiti ubi cernimus alte
exhalare vaporem altaria ferreque fumum;
nam procul hinc dubio nobis simulacra genuntur: —
nunc igitur quoniam quassatis undique vasis
diffluere umorem et laticem discedere cernis 435
et nebula ac fumus quoniam discedit in auras,
crede animam quoque diffundi multoque perire
ocius et citius dissolvi in corpora prima,
cum semel ex hominis membris ablata recessit.
quippe etenim corpus, quod vas quasi constitit eius, 440
quam cohibere nequit conquassatum ex aliqua re
ac rarefactum detracto sanguine venis,

aëre qui credas posse hanc cohiberier ullo?
corpore qui nostro rarus magis is cohibessit?
  Praeterea gigni pariter cum corpore et una 445
crescere sentimus pariterque senescere mentem.
nam velut infirmo pueri teneroque vagantur
corpore, sic animi sequitur sententia tenvis.
inde ubi robustis adolevit viribus aetas,
consilium quoque maius et auctior est animi vis. 450
post ubi iam validis quassatum est viribus aevi
corpus et obtusis ceciderunt viribus artus,
claudicat ingenium, delirat lingua, labat mens,
omnia deficiunt atque uno tempore desunt.
ergo dissolui quoque convenit omnem animai 455
naturam, ceu fumus, in altas aëris auras;
quandoquidem gigni pariter pariterque videmus
crescere et, ut docui, simul aevo fessa fatisci.
  Huc accedit uti videamus, corpus ut ipsum
suscipere inmanis morbos durumque dolorem, 460
sic animum curas acris luctumque metumque;
quare participem leti quoque convenit esse.
quin etiam morbis in corporis avius errat
saepe animus; dementit enim deliraque fatur
interdumque gravi lethargo fertur in altum 465
aeternumque soporem oculis nutuque cadenti,
unde neque exaudit voces nec noscere voltus
illorum potis est, ad vitam qui revocantes
circumstant lacrimis rorantes ora genasque.
quare animum quoque dissolui fateare necessest, 470
quandoquidem penetrant in eum contagia morbi;
nam dolor ac morbus leti fabricator uterquest,
multorum exitio perdocti quod sumus ante.
denique quor, hominem cum vini vis penetravit 476
acris et in venas discessit diditus ardor,
consequitur gravitas membrorum, praepediuntur
crura vacillanti, tardescit lingua, madet mens,

nant oculi, clamor singultus iurgia gliscunt, 480
et iam cetera de genere hoc quaecumque secuntur,
cur ea sunt, nisi quod vemens violentia vini
conturbare animam consuevit corpore in ipso?
at quaecumque queunt conturbari inque pediri,
significant, paulo si durior insinuarit 485
causa, fore ut pereant aevo privata futuro.
quin etiam subito vi morbi saepe coactus
ante oculos aliquis nostros, ut fulminis ictu,
concidit et spumas agit, ingemit et tremit artus,
desipit, extentat nervos, torquetur, anhelat 490
inconstanter, et in iactando membra fatigat.
nimirum quia vis morbi distracta per artus
turbat, agens animam spumat, quasi in aequore salso
ventorum validis fervescunt viribus undae.
exprimitur porro gemitus, quia membra dolore 495
adficiuntur et omnino quod semina vocis
eiciuntur et ore foras glomerata feruntur
qua quasi consuerunt et sunt munita viai.
desipientia fit, quia vis animi atque animai
conturbatur et, ut docui, divisa seorsum 500
disiectatur eodem illo distracta veneno.
inde ubi iam morbi reflexit causa reditque
in latebras acer corrupti corporis umor,
tum quasi vaccillans primum consurgit et omnis
paulatim redit in sensus animamque receptat. 505
haec igitur tantis ubi morbis corpore in ipso
iactentur miserisque modis distracta laborent,
cur eadem credis sine corpore in aëre aperto
cum validis ventis aetatem degere posse?
et quoniam mentem sanari, corpus ut aegrum, 510
cernimus et flecti medicina posse videmus,
id quoque praesagit mortalem vivere mentem.
addere enim partis aut ordine traiecere aecumst
aut aliquid prorsum de summa detrahere hilum,

commutare animum quicumque adoritur et infit 515
aut aliam quamvis naturam flectere quaerit;
at neque transferri sibi partis nec tribui vult
inmortale quod est quicquam neque defluere hilum.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante. 520
ergo animus sive aegrescit, mortalia signa
mittit, uti docui, seu flectitur a medicina.
usque adeo falsae rationi vera videtur
res occurrere et effugium praecludere eunti
ancipitique refutatu convincere falsum. 525

Denique saepe hominem paulatim cernimus ire
et membratim vitalem deperdere sensum;
in pedibus primum digitos livescere et unguis,
inde pedes et crura mori, post inde per artus
ire alios tractim gelidi vestigia leti. 530
scinditur itque animae hoc quoniam natura nec uno
tempore sincera existit, mortalis habendast.
quod si forte putas ipsam se posse per artus
introsum trahere et partis conducere in unum
atque ideo cunctis sensum deducere membris, 535
at locus ille tamen, quo copia tanta animai
cogitur, in sensu debet maiore videri;
qui quoniam nusquamst, nimirum ut diximus ante,
dilaniata foras dispargitur, interit ergo.
quin etiam si iam libeat concedere falsum 540
et dare posse animam glomerari in corpore eorum,
lumina qui lincunt moribundi particulatim,
mortalem tamen esse animam fateare necesse,
nec refert utrum pereat dispersa per auras
an contracta suis e partibus obbrutescat, 545
quando hominem totum magis ac magis undique sensus
deficit et vitae minus et minus undique restat.

Et quoniam mens est hominis pars una, loco quae
fixa manet certo, velut aures atque oculi sunt

atque alii sensus qui vitam cumque gubernant, 550
et veluti manus atque oculus naresve seorsum
secreta ab nobis nequeunt sentire neque esse,
sed tamen in parvo liquuntur tempore tabe,
sic animus per se non quit sine corpore et ipso
esse homine, illius quasi quod vas esse videtur 555
sive aliud quid vis potius coniunctius ei
fingere, quandoquidem conexu corpus adhaeret.

Denique corporis atque animi vivata potestas
inter se coniuncta valent vitaque fruuntur;
nec sine corpore enim vitalis edere motus 560
sola potest animi per se natura nec autem
cassum anima corpus durare et sensibus uti.
scilicet avolsus radicibus ut nequit ullam
dispicere ipse oculus rem seorsum corpore toto,
sic anima atque animus per se nil posse videtur. 565
nimirum quia per venas et viscera mixtim,
per nervos atque ossa, tenentur corpore ab omni
nec magnis intervallis primordia possunt
libera dissultare, ideo conclusa moventur
sensiferos motus quos extra corpus in auras 570
aëris haut possunt post mortem eiecta moveri
propterea quia non simili ratione tenentur.
corpus enim atque animans erit äër, si cohibere
sese anima atque in eo poterit concludere motus
quos ante in nervis et in ipso corpore agebat. 575
quin etiam finis dum vitae vertitur intra,
saepe aliqua tamen e causa labefacta videtur
ire anima ac toto solui de corpore velle
et quasi supremo languescere tempore voltus
molliaque exsangui trunco cadere omnia membra. 580
quod genus est, animo male factum cum perhibetur
aut animam liquisse; ubi iam trepidatur et omnes
extremum cupiunt vitae repraehendere vinclum.
conquassatur enim tum mens animaeque potestas

omnis et haec ipso cum corpore conlabefiunt; 585
ut gravior pauló possit dissolvere causa.
quid dubitas tandem quin extra prodita corpus
inbecilla foras in aperto, tegmine dempto,
non modo non omnem possit durare per aevom,
sed minimum quodvis nequeat consistere tempus? 590
quare etiam atque etiam resoluto corporis omni
tegmine et eiectis extrà vitalibus auris
dissolui sensus animi fateare necessest
atque animam, quoniam coniunctast causa duobus.

Denique cum corpus nequeat perferre animai 595
discidium quin in taetro tabescat odore,
quid dubitas quin ex imo penitusque coorta
emanarit uti fumus diffusa animae vis,
atque ideo tanta mutatum putre ruina
conciderit corpus, penitus quia mota loco sunt 600
fundamenta, foras anima emanante per artus
perque viarum omnis flexus, in corpore qui sunt,
atque foramina? multimodis ut noscere possis
dispertitam animae naturam exisse per artus
et prius esse sibi distractam corpore in ipso, 605
quam prolapsa foras enaret in aëris auras.
nec sibi enim quisquam moriens sentire videtur
ire foras animam incolumem de corpore toto
nec prius ad iugulum et supera succedere fauces,
verum deficere in certa regione locatam; 610
ut sensus alios in parti quemque sua scit
dissolui. quod si inmortalis nostra foret mens,
non tam se moriens dissolvi conquereretur,
sed magis ire foras vestemque relinquere, ut anguis.

Denique cur animi numquam mens consiliumque 615
gignitur in capite aut pedibus manibusve, sed unis
sedibus et certis regionibus omnibus haeret,
si non certa loca ad nascendum reddita cuique
sunt, et ubi quicquid possit durare creatum,

atque ita multimodis partitis artubus esse, 620
membrorum ut numquam existat praeposterus ordo?
usque adeo sequitur res rem neque flamma creari
fluminibus solitast neque in igni gignier algor.

Praeterea si inmortalis natura animaist
et sentire potest secreta a corpore nostro, 625
quinque, ut opinor, eam faciundum est sensibus auctam;
nec ratione alia nosmet proponere nobis
possumus infernas animas Acherunte vagari.
pictores itaque et scriptorum saecla priora
sic animas intro duxerunt sensibus auctas. 630
at neque sorsum oculi neque nares nec manus ipsa
esse potest animae neque sorsum lingua, neque aures
auditu per se possunt sentire neque esse.

Et quoniam toto sentimus corpore inesse
vitalem sensum et totum esse animale videmus, 635
si subito medium celeri praeciderit ictu
vis aliqua ut sorsum partem secernat utramque,
dispertita procul dubio quoque vis animai
et discissa simul cum corpore dissicietur.
at quod scinditur et partis discedit in ullas, 640
scilicet aeternam sibi naturam abnuit esse.
falciferos memorant currus abscidere membra
saepe ita de subito permixta caede calentis,
ut tremere in terra videatur ab artubus id quod
decidit abscisum, cum mens tamen atque hominis vis 645
mobilitate mali non quit sentire dolorem;
et semel in pugnae studio quod dedita mens est,
corpore reliqüo pugnam caedesque petessit,
nec tenet amissam laevam cum tegmine saepe
inter equos abstraxe rotas falcesque rapaces, 650
nec cecidisse alius dextram, cum scandit et instat.
inde alius conatur adempto surgere crure,
cum digitos agitat propter moribundus humi pes.
et caput abscisum calido viventeque trunco

servat humi voltum vitalem oculosque patentis, 655
donec reliquias animai reddidit omnes.
quin etiam tibi si lingua vibrante micanti
serpentis cauda e procero corpore utrumque
sit libitum in multas partis discidere ferro,
omnia iam sorsum cernes ancisa recenti 660
volnere tortari et terram conspargere tabo,
ipsam seque retro partem petere ore priorem,
volneris ardenti ut morsu premat icta dolorem.
omnibus esse igitur totas dicemus in illis
particulis animas? at ea ratione sequetur 665
unam animantem animas habuisse in corpore multas.
ergo divisast ea quae fuit una simul cum
corpore; quapropter mortale utrumque putandumst,
in multas quoniam partis disciditur aeque.

Praeterea si inmortalis natura animai 670
constat et in corpus nascentibus insinuatur,
cur super anteactam aetatem meminisse nequimus
nec vestigia gestarum rerum ulla tenemus?
nam si tanto operest animi mutata potestas,
omnis ut actarum exciderit retinentia rerum, 675
non, ut opinor, id a leto iam longiter errat;
quapropter fateare necessest quae fuit ante
interiisse et quae nunc est nunc esse creatam.

Praeterea si iam perfecto corpore nobis
inferri solitast animi vivata potestas 680
tum cum gignimur et vitae cum limen inimus,
haud ita conveniebat uti cum corpore et una
cum membris videatur in ipso sanguine cresse,
sed velut in cavea per se sibi vivere solam.
[convenit ut sensu corpus tamen affluat omne] 685
quod fieri totum contra manifesta docet res;
namque ita conexa est per venas viscera nervos
ossaque, uti dentes quoque sensu participentur;
morbus ut indicat et gelidai stringor aquai

et lapis oppressus, subiit si e frugibus, asper. 690
quare etiam atque etiam neque originis esse putandumst
expertis animas nec leti lege solutas.
nam neque tanto opere adnecti potuisse putandumst
corporibus nostris extrinsecus insinuatas,
nec, tam contextae cum sint, exire videntur 695
incolumes posse et salvas exsolvere sese
omnibus e nervis atque ossibus articulisque.
quod si forte putas extrinsecus insinuatam
permanare animam nobis per membra solere,
tanto quique magis cum corpore fusa peribit. 700
quod permanat enim dissolvitur, interit ergo.
dispertitus enim per caulas corporis omnis
ut cibus, in membra atque artus cum diditur omnis,
disperit atque aliam naturam sufficit ex se,
sic anima atque animus quamvis integra recens in 705
corpus eunt, tamen in manando dissoluuntur,
dum quasi per caulas omnis diduntur in artus
particulae quibus haec animi natura creatur,
quae nunc in nostro dominatur corpore nata
ex illa quae tum periit partita per artus. 710
quapropter neque natali privata videtur
esse die natura animae nec funeris expers.

Semina praeterea linquontur necne animai
corpore in exanimo? quod si lincuntur et insunt,
haut erit ut merito inmortalis possit haberi, 715
partibus amissis quoniam libata recessit.
sin ita sinceris membris ablata profugit
ut nullas partis in corpore liquerit ex se,
unde cadavera rancenti iam viscere vermes
expirant atque unde animantum copia tanta 720
exos et exanguis tumidos perfluctuat artus?
quod si forte animas extrinsecus insinuari
vermibus et privas in corpora posse venire
credis nec reputas cur milia multa animarum

conveniant unde una recesserit, hoc tamen est ut 725
quaerendum videatur et in discrimen agendum,
utrum tandem animae venentur semina quaeque
vermiculorum ipsaeque sibi fabricentur ubi sint,
an quasi corporibus perfectis insinuentur.
at neque cur faciant ipsae quareve laborent 730
dicere suppeditat. neque enim, sine corpore cum sunt,
sollicitae volitant morbis alguque fameque;
corpus enim magis his vitiis adfine laborat
et mala multa animus contage fungitur eius.
sed tamen his esto quamvis facere utile corpus, 735
cum subeant; at qua possint via nulla videtur.
haut igitur faciunt animae sibi corpora et artus.
nec tamen est utqui perfectis insinuentur
corporibus; neque enim poterunt suptiliter esse
conexae neque consensus contagia fient. 740

Denique cur acris violentia triste leonum
seminium sequitur, volpes dolus, et fuga cervos,
et iam cetera de genere hoc cur omnia membris
ex ineunte aevo generascunt ingenioque, 745
si non, certa suo quia semine seminioque
vis animi pariter crescit cum corpore toto?
quod si inmortalis foret et mutare soleret
corpora, permixtis animantes moribus essent,
effugeret canis Hyrcano de semine saepe 750
cornigeri incursum cervi tremeretque per auras
aëris accipiter fugiens veniente columba,
desiperent homines, saperent fera saecla ferarum.
illud enim falsa fertur ratione, quod aiunt
inmortalem animam mutato corpore flecti. 755
quod mutatur enim dissolvitur, interit ergo;
traiciuntur enim partes atque ordine migrant;
quare dissolui quoque debent posse per artus,
denique ut intereant una cum corpore cunc .
sin animas hominum dicent in corpora sem

ire humana, tamen quaeram cur e sapienti
stulta queat fieri, nec prudens sit puer ullus,
nec tam doctus equae pullus quam fortis equi vis.
scilicet in tenero tenerascere corpore mentem 765
confugient. quod si iam fit, fateare necessest
mortalem esse animam, quoniam mutata per artus
tanto opere amittit vitam sensumque priorem.
quove modo poterit pariter cum corpore quoque
confirmata cupitum aetatis tangere florem 770
vis animi, nisi erit consors in origine prima?
quidve foras sibi vult membris exire senectis?
an metuit conclusa manere in corpore putri
et domus aetatis spatio ne fessa vetusto
obruat? at non sunt immortali ulla pericla. 775

Denique conubia ad Veneris partusque ferarum
esse animas praesto deridiculum esse videtur,
expectare immortalis mortalia membra
innumero numero certareque praeproperanter
inter se quae prima potissimaque insinuetur; 780
si non forte ita sunt animarum foedera pacta
ut quae prima volans advenerit insinuetur
prima neque inter se contendant viribus hilum.

Denique in aethere non arbor, non aequore in alto
nubes esse queunt nec pisces vivere in arvis 785
nec cruor in lignis neque saxis sucus inesse.
certum ac dispositumst ubi quicquit crescat et insit.
sic animi natura nequit sine corpore oriri
sola neque a nervis et sanguine longiter esse.
quod si (posset enim multo prius) ipsa animi vis 790
in capite aut umeris aut imis calcibus esse
posset et innasci quavis in parte, soleret
tandem in eodem homine atque in eodem vase manere.
quod quoniam nostro quoque constat corpore certum
dispositumque videtur ubi esse et crescere possit 795
sorsum anima atque animus, tanto magis infitiandum

totum posse extra corpus durare genique.
quare, corpus ubi interiit, periisse necessest
confiteare animam distractam in corpore toto.
quippe etenim mortale aeterno iungere et una 800
consentire putare et fungi mutua posse
desiperest; quid enim diversius esse putandumst
aut magis inter se disiunctum discrepitansque,
quam mortale quod est inmortali atque perenni
iunctum in concilio saevas tolerare procellas? 805
quod si forte ideo magis immortalis habendast, 819
quod letalibus ab rebus munita tenetur,
aut quia non veniunt omnino aliena salutis
aut quia quae veniunt aliqua ratione recedunt
pulsa prius quam quid noceant sentire queamus,
multa tamen [illegible] animam mala, multa pericla
praeter enim quam quod morbis cum corporis aegret,
advenit id quod eam de rebus saepe futuris 825
macerat inque metu male habet curisque fatigat
praeteritisque male admissis peccata remordent.
adde furorem animi proprium atque oblivia rerum,
adde quod in nigras lethargi mergitur undas.

Nil igitur mors est ad nos neque pertinet hilum, 830
quandoquidem natura animi mortalis habetur;
et velut anteacto nil tempore sensimus aegri,
ad confligendum venientibus undique Poenis,
omnia cum belli trepido concussa tumultu
horrida contremuere sub altis aetheris oris, 835
in dubioque fuere utrorum ad regna cadendum
omnibus humanis esset terraque marique,
sic, ubi non erimus, cum corporis atque animai
discidium fuerit quibus e sumus uniter apti,
scilicet haud nobis quicquam, qui non erimus tum, 840
accidere omnino poterit sensumque movere,
non si terra mari miscebitur et mare caelo.
et si iam nostro sentit de corpore postquam

distractast animi natura animaeque potestas,
nil tamen est ad nos qui comptu coniugioque 845
corporis atque animae consistimus uniter apti.
nec, si materiem nostram collegerit aetas
post obitum rursumque redegerit ut sita nunc est
atque iterum nobis fuerint data lumina vitae,
pertineat quicquam tamen ad nos id quoque factum, 850
interrupta semel cum sit repetentia nostri.
et nunc nil ad nos de nobis attinet, ante
qui fuimus, neque iam de illis nos adficit angor.
nam cum respicias inmensi temporis omne
praeteritum spatium, tum motus materiai 855
multimodis quam sint, facile hoc adcredere possis,
semina saepe in eodem, ut nunc sunt, ordine posta
haec eadem, quibus e nunc nos sumus, ante fuisse.
nec memori tamen id quimus repraehendere mente;
inter enim iectast vitai pausa vageque 860
deerrarunt passim motus ab sensibus omnes.
debet enim, misere si forte aegreque futurumst,
ipse quoque esse in eo tum tempore, cui male possit
accidere. id quoniam mors eximit, esseque probet
illum cui possint incommoda conciliari, 865
scire licet nobis nil esse in morte timendum
nec miserum fieri, qui non est, posse neque hilum
differre anne ullo fuerit iam tempore natus,
mortalem vitam mors cum inmortalis ademit.

Proinde ubi se videas hominem indignarier ipsum, 870
post mortem fore ut aut putescat corpore posto
aut flammis interfiat malisve ferarum,
scire licet non sincerum sonere atque subesse
caecum aliquem cordi stimulum, quamvis neget ipse
credere se quemquam sibi sensum in morte futurum. 875
non, ut opinor, enim dat quod promittit et unde,
nec radicitus e vita se tollit et eicit,
sed facit esse sui quiddam super inscius ipse.

vivus enim sibi cum proponit quisque futurum,
corpus uti volucres lacerent in morte feraeque, 880
ipse sui miseret; neque enim se dividit illim
nec removet satis a proiecto corpore et illum
se fingit sensuque suo contaminat astans.
hinc indignatur se mortalem esse creatum
nec videt in vera nullum fore morte alium se 885
qui possit vivus sibi se lugere peremptum
stansque iacentem se lacerari urive dolere.
nam si in morte malumst malis morsuque ferarum
tractari, non invenio qui non sit acerbum
ignibus inpositum calidis torrescere flammis 890
aut in melle situm suffocari atque rigere
frigore, cum summo gelidi cubat aequore saxi,
urgerive superne obtritum pondere terrae.

'Iam iam non domus accipiet te laeta, neque uxor
optima nec dulces occurrent oscula nati 895
praeripere et tacita pectus dulcedine tangent.
non poteris factis florentibus esse, tuisque
praesidium. misero misere' aiunt 'omnia ademit
una dies infesta tibi tot praemia vitae.'
illud in his rebus non addunt 'nec tibi earum 900
iam desiderium rerum super insidet una.'
quod bene si videant animo dictisque sequantur,
dissoluant animi magno se angore metuque.
'tu quidem ut es leto sopitus, sic eris aevi
quod superest cunctis privatu' doloribus aegris: 905
at nos horrifico cinefactum te prope busto
insatiabiliter deflevimus, aeternumque
nulla dies nobis maerorem e pectore demet.'
illud ab hoc igitur quaerendum est, quid sit amari
tanto opere, ad somnum si res redit atque quietem, 910
cur quisquam aeterno possit tabescere luctu.

Hoc etiam faciunt ubi discubuere tenentque
pocula saepe homines et inumbrant ora coronis,

ex animo ut dicant 'brevis hic est fructus homullis;
iam fuerit neque post umquam revocare licebit.' 915
tamquam in morte mali cum primis hoc sit eorum,
quod sitis exurat miseros atque arida torres,
aut aliae cuius desiderium insideat rei.
nec sibi enim quisquam tum se vitamque requirit,
cum pariter mens et corpus sopita quiescunt; 920
nam licet aeternum per nos sic esse soporem,
nec desiderium nostri nos adficit ullum.
et tamen haudquaquam nostros tunc illa per artus
longe ab sensiferis primordia motibus errant,
cum correptus homo ex somno se colligit ipse. 925
multo igitur mortem minus ad nos esse putandumst,
si minus esse potest quam quod nil esse videmus;
maior enim turbae disiectus materiai
consequitur leto nec quisquam expergitus exstat,
frigida quem semel est vitai pausa secuta. 930
Denique si vocem rerum natura repente
mittat et hoc alicui nostrum sic increpet ipsa
'quid tibi tanto operest, mortalis, quod nimis aegris
luctibus indulges? quid mortem congemis ac fles?
nam gratis anteacta fuit tibi vita priorque 935
et non omnia pertusum congesta quasi in vas
commoda perfluxere atque ingrata interiere:
cur non ut plenus vitae conviva recedis
aequo animoque capis securam, stulte, quietem?
sin ea quae fructus cumque es periere profusa 940
vitaque in offensust, cur amplius addere quaeris,
rursum quod pereat male et ingratum occidat omne,
non potius vitae finem facis atque laboris?
nam tibi praeterea quod machiner inveniamque,
quod placeat, nil est: eadem sunt omnia semper. 945
si tibi non annis corpus iam marcet et artus
confecti languent, eadem tamen omnia restant,
omnia si pergas vivendo vincere saecla,

atque etiam potius, si numquam sis moriturus,'
quid respondemus, nisi iustam intendere litem
naturam et veram verbis exponere causam?
grandior hic vero si iam seniorque queratur
atque obitum lamentetur miser amplius aequo,
non merito inclamet magis et voce increpet acri?
'aufer abhinc lacrimas, balatro, et compesce querellas. 955
omnia perfunctus vitai praemia marces.
sed quia semper aves quod abest, praesentia temnis,
inperfecta tibi elapsast ingrataque vita
et nec opinanti mors ad caput adstitit ante
quam satur ac plenus possis discedere rerum. 960
nunc aliena tua tamen aetate omnia mitte
aequo animoque agedum magnus concede: necessest.'
iure, ut opinor, agat, iure increpet inciletque;
cedit enim rerum novitate extrusa vetustas
semper, et ex aliis aliud reparare necessest; 965
nec quisquam in barathrum nec Tartara deditur atra:
materies opus est ut crescant postera saecla;
quae tamen omnia te vita perfuncta sequentur;
nec minus ergo ante haec quam tu cecidere, cadentque.
sic alid ex alio numquam desistet oriri 970
vitaque mancipio nulli datur, omnibus usu.
respice item quam nil ad nos anteacta vetustas
temporis aeterni fuerit, quam nascimur ante.
hoc igitur speculum nobis natura futuri
temporis exponit post mortem denique nostram. 975
numquid ibi horribile apparet, num triste videtur
quicquam, non omni somno securius exstat?

Atque ea nimirum quaecumque Acherunte profundo
prodita sunt esse, in vita sunt omnia nobis.
nec miser inpendens magnum timet aëre saxum 980
Tantalus, ut famast, cassa formidine torpens;
sed magis in vita divom metus urget inanis
mortalis casumque timent quem cuique ferat fors.

nec Tityon volucres ineunt Acherunte iacentem
nec quod sub magno scrutentur pectore quicquam 985
perpetuam aetatem possunt reperire profecto.
quamlibet immani proiectu corporis exstet,
qui non sola novem dispessis iugera membris
optineat, sed qui terrai totius orbem,
non tamen aeternum poterit perferre dolorem 990
nec praebere cibum proprio de corpore semper.
sed Tityos nobis hic est, in amore iacentem
quem volucres lacerant atque exest anxius angor
aut alia quavis scindunt cuppedine curae.
Sisyphus in vita quoque nobis ante oculos est 995
qui petere a populo fasces saevasque secures
imbibit et semper victus tristisque recedit.
nam petere imperium quod inanest nec datur umquam,
atque in eo semper durum suffere laborem,
hoc est adverso nixantem trudere monte 1000
saxum quod tamen e summo iam vertice rusum
volvitur et plani raptim petit aequora campi.
deinde animi ingratam naturam pascere semper
atque explere bonis rebus satiareque numquam,
quod faciunt nobis annorum tempora, circum 1005
cum redeunt fetusque ferunt variosque lepores,
nec tamen explemur vitai fructibus umquam,
hoc, ut opinor, id est, aevo florente puellas
quod memorant laticem pertusum congerere in vas,
quod tamen expleri nulla ratione potestur. 1010
Cerberus et furiae iam vero et lucis egestas,
Tartarus horriferos eructans faucibus aestus,
qui neque sunt usquam nec possunt esse profecto.
sed metus in vita poenarum pro male factis
est insignibus insignis, scelerisque luella, 1015
carcer et horribilis de saxo iactu' deorsum,
verbera carnifices robur pix lammina taedae;
quae tamen etsi absunt, at mens sibi conscia factis

praemetuens adhibet stimulos terretque flagellis
nec videt interea qui terminus esse malorum 1020
possit nec quae sit poenarum denique finis
atque eadem metuit magis haec ne in morte gravescant.
hic Acherusia fit stultorum denique vita.

Hoc etiam tibi tute interdum dicere possis
'lumina sis oculis etiam bonus Ancu' reliquit 1025
qui melior multis quam tu fuit, improbe, rebus.
inde alii multi reges rerumque potentes
occiderunt, magnis qui gentibus imperitarunt.
ille quoque ipse, viam qui quondam per mare magnum
stravit iterque dedit legionibus ire per altum 1030
ac pedibus salsas docuit superare lucunas
et contemsit equis insultans murmura ponti,
lumine adempto animam moribundo corpore fudit.
Scipiadas, belli fulmen, Carthaginis horror,
ossa dedit terrae proinde ac famul infimus esset. 1035
adde repertores doctrinarum atque leporum,
adde Heliconiadum comites; quorum unus Homerus
sceptra potitus eadem aliis sopitu' quietest.
denique Democritum postquam matura vetustas
admonuit memores motus languescere mentis, 1040
sponte sua leto caput obvius optulit ipse.
ipse Epicurus obit decurso lumine vitae,
qui genus humanum ingenio superavit et omnis
restincxit, stellas exortus ut aetherius sol.
tu vero dubitabis et indignabere obire? 1045
mortua cui vita est prope iam vivo atque videnti,
qui somno partem maiorem conteris aevi
et vigilans stertis nec somnia cernere cessas
sollicitamque geris cassa formidine mentem
nec reperire potes tibi quid sit saepe mali, cum 1050
ebrius urgeris multis miser undique curis
atque animi incerto fluitans errore vagaris.'

Si possent homines, proinde ac sentire videntur

pondus inesse animo quod se gravitate fatiget,
e quibus id fiat causis quoque noscere et unde 1055
tanta mali tamquam moles in pectore constet,
haut ita vitam agerent, ut nunc plerumque videmus
quid sibi quisque velit nescire et quaerere semper
commutare locum quasi onus deponere possit.
exit saepe foras magnis ex aedibus ille, 1060
esse domi quem pertaesumst, subitoque revertit,
quippe foris nilo melius qui sentiat esse.
currit agens mannos ad villam praecipitanter,
auxilium tectis quasi ferre ardentibus instans;
oscitat extemplo, tetigit cum limina villae, 1065
aut abit in somnum gravis atque oblivia quaerit,
aut etiam properans urbem petit atque revisit.
hoc se quisque modo fugit (at quem scilicet, ut fit,
effugere haut potis est, ingratis haeret) et odit
propterea, morbi quia causam non tenet aeger; 1070
quam bene si videat, iam rebus quisque relictis
naturam primum studeat cognoscere rerum,
temporis aeterni quoniam, non unius horae,
ambigitur status, in quo sit mortalibus omnis
aetas, post mortem quae restat cumque manenda. 1075
Denique tanto opere in dubiis trepidare periclis
quae mala nos subigit vitai tanta cupido?
certa quidem finis vitae mortalibus adstat
nec devitari letum pote quin obeamus.
praeterea versamur ibidem atque insumus usque 1080
nec nova vivendo procuditur ulla voluptas;
sed dum abest quod avemus, id exsuperare videtur
cetera; post aliut, cum contigit illud, avemus
et sitis aequa tenet vitai semper hiantis.
posteraque in dubiost fortunam quam vehat aetas, 1085
quidve ferat nobis casus quive exitus instet.
nec prorsum vitam ducendo demimus hilum
tempore de mortis nec delibare valemus,

quo minus esse diu possimus forte perempti.
proinde licet quot vis vivendo condere saecla; 1090
mors aeterna tamen nilo minus illa manebit,
nec minus ille diu iam non erit, ex hodierno
lumine qui finem vitai fecit, et ille,
mensibus atque annis qui multis occidit ante.

T. LUCRETI CARI

DE RERUM NATURA

LIBER QUARTUS.

[Avia Pieridum peragro loca nullius ante
trita solo. iuvat integros accedere fontis
atque haurire, iuvatque novos decerpere flores
insignemque meo capiti petere inde coronam
unde prius nulli velarint tempora musae; 5
primum quod magnis doceo de rebus et artis
religionum animum nodis exsolvere pergo,
deinde quod obscura de re tam lucida pango
carmina, musaeo contingens cuncta lepore.
id quoque enim non ab nulla ratione videtur; 10
nam veluti pueris absinthia taetra medentes
cum dare conantur, prius oras pocula circum
contingunt mellis dulci flavoque liquore,
ut puerorum aetas inprovida ludificetur
labrorum tenus, interea perpotet amarum 15
absinthi laticem deceptaque non capiatur,
sed potius tali pacto recreata valescat,
sic ego nunc, quoniam haec ratio plerumque videtur
tristior esse quibus non est tractata, retroque
volgus abhorret ab hac, volui tibi suaviloquenti 20
carmine Pierio rationem exponere nostram
et quasi musaeo dulci contingere melle,
si tibi forte animum tali ratione tenere

versibus in nostris possem, dum percipis omnem
naturam rerum ac persentis utilitatem.] 25
Atque animi quoniam docui natura quid esset
et quibus e rebus cum corpore compta vigeret
quove modo distracta rediret in ordia prima,
nunc agere incipiam tibi, quod vementer ad has res
attinet, esse ea quae rerum simulacra vocamus; 30
quae, quasi membranae summo de corpore rerum
dereptae, volitant ultroque citroque per auras,
atque eadem nobis vigilantibus obvia mentes
terrificant atque in somnis, cum saepe figuras
contuimur miras simulacraque luce carentum, 35
quae nos horrifice languentis saepe sopore
excierunt, ne forte animas Acherunte reamur
effugere aut umbras inter vivos volitare
neve aliquid nostri post mortem posse relinqui,
cum corpus simul atque animi natura perempta 40
in sua discessum dederint primordia quaeque.
Dico igitur rerum effigias tenuisque figuras
mittier ab rebus summo de corpore rerum,
quoi quasi membranae, vel cortex nominitandast, 50
quod speciem ac formam similem gerit eius imago
cuiuscumque cluet de corpore fusa vagari.
id licet hinc quamvis hebeti cognoscere corde.
principio quoniam mittunt in rebus apertis
corpora res multae, partim diffusa solute, 55
robora ceu fumum mittunt ignesque vaporem,
et partim contexta magis condensaque, ut olim
cum teretis ponunt tunicas aestate cicadae,
et vituli cum membranas de corpore summo
nascentes mittunt, et item cum lubrica serpens 60
exuit in spinis vestem; nam saepe videmus
illorum spoliis vepres volitantibus auctas:
quae quoniam fiunt, tenuis quoque debet imago
ab rebus mitti summo de corpore rerum.



nam cur illa cadant magis ab rebusque recedant 65
quam quae tenvia sunt, hiscendist nulla potestas;
praesertim cum sint in summis corpora rebus
multa minuta, iaci quae possint ordine eodem
quo fuerint et formai servare figuram,
et multo citius, quanto minus indupediri 70
pauca queunt et quae sunt prima fronte locata.
nam certe iacere ac largiri multa videmus,
non solum ex alto penitusque, ut diximus ante,
verum de summis ipsum quoque saepe colorem.
et volgo faciunt id luteà russaque vela 75
et ferrugina, cum magnis intenta theatris
per malos volgata trabesque trementia flutant;
namque ibi consessum caveai supter et omnem
scaenai speciem, patrum coetumque decorum
inficiunt coguntque suo fluitare colore. 80
et quanto circum mage sunt inclusa theatri
moenibu', tam magis haec intus perfusa lepore
omnia conrident correpta luce diei.
ergo lintea de summo cum corpore fucum
mittunt, effigias quoque debent mittere tenvis 85
res quaeque, ex summo quoniam iaculantur utraque.
sunt igitur iam formarum vestigia certa
quae vòlgo volitant suptili praedita filo
nec singillatim possunt secreta videri.
praterea omnis odor fumus vapor atque aliae res 90
consimiles ideo diffusae e rebus abundant,
ex alto quia dum veniunt intrinsecus ortae,
scinduntur per iter flexum, nec recta viarum
ostia sunt qua contendant exire coortae.
at contra tenuis summi membrana coloris 95
cum iacitur, nil est quod eam discerpere possit,
in promptu quoniam est in prima fronte locata.
postremo speculis in aqua splendoreque in omni
quaecumque apparent nobis simulacra, necessest,

quandoquidem simili specie sunt praedita rerum 100
extima, imaginibus missis consistere rerum.
sunt igitur tenues formae rerum similesque 104
effigiae, singillatim quas cernere nemo
cum possit tamen, adsiduo crebroque repulsu
reiectae reddunt speculorum ex aequore visum,
nec ratione alia servari posse videntur,
tanto opere ut similes reddantur cuique figurae.
Nunc age quam tenui natura constet imago 110
percipe. et in primis, quoniam primordia tantum
sunt infra nostros sensus tantoque minora
quam quae primum oculi coeptant non posse tueri,
nunc tamen id quoque uti confirmem, exordia rerum
cunctarum quam sint suptilia percipe paucis. 115
primum animalia sunt iam partim tantula, quorum
tertia pars nulla possit ratione videri.
horum intestinum quodvis quale esse putandumst!
quid cordis globus aut oculi? quid membra? quid artus?
quantula sunt! quid praeterea primordia quaeque 120
unde anima atque animi constet natura necessumst?
nonne vides quam sint subtilia quamque minuta?
praeterea quaecumque suo de corpore odorem
expirant acrem, panaces absinthia taetra
habrotonique graves et tristia centaurea, 125
quorum unum quidvis leviter si forte duobus
* * * * * *
quin potius noscas rerum simulacra vagari
multa modis multis nulla vi cassaque sensu?
[Sed ne forte putes ea demum sola vagari,
quaecumque ab rebus rerum simulacra recedunt, 130
sunt etiam quae sponte sua gignuntur et ipsa
constituuntur in hoc caelo qui dicitur aër,
quae multis formata modis sublime feruntur
nec speciem mutare suam liquentia cessant
et cuiusque modi formarum vertere in oras; 135

ut nubes facile interdum concrescere in alto
cernimus et mundi speciem violare serenam
aëra mulcentes motu. nam saepe Gigantum
ora volare videntur et umbram ducere late,
interdum magni montes avolsaque saxa 140
montibus anteire et solem succedere praeter,
inde alios trahere atque inducere belua nimbos.]
Nunc ea quam facili et celeri ratione genantur
perpetuoque fluant ab rebus lapsaque cedant
. . . .
semper enim summum quicquid de rebus abundat 145
quod iaculentur. et hoc alias cum pervenit in res,
transit, ut in primis vitrum. sed ubi aspera saxa
aut in materiam ligni pervenit, ibi iam
scinditur ut nullum simulacrum reddere possit.
at cum splendida quae constant opposta fuerunt 150
densaque, ut in primis speculum est, nil accidit horum;
nam neque, uti vitrum, potis est transire, neque autem
scindi; quam meminit levor praestare salutem.
quapropter fit ut hinc nobis simulacra redundent.
et quamvis subito quovis in tempore quamque 155
rem contra speculum ponas, apparet imago;
perpetuo fluere ut noscas e corpore summo
texturas rerum tenuis tenuisque figuras.
ergo multa brevi spatio simulacra genuntur,
ut merito celer his rebus dicatur origo. 160
et quasi multa brevi spatio summittere debet
lumina sol ut perpetuo sint omnia plena,
sic ab rebus item simili ratione necessest
temporis in puncto rerum simulacra ferantur
multa modis multis in cunctas undique partis; 165
quandoquidem speculum quocumque obvertimus oris,
res ibi respondent simili forma atque colore.
praeterea modo cum fuerit liquidissima caeli
tempestas, perquam subito fit turbida foede,

undique uti tenebras omnis Acherunta rearis 170
liquisse et magnas caeli complesse cavernas.
usque adeo taetra nimborum nocte coorta
inpendent atrae formidinis ora superne;
quorum quantula pars sit imago dicere nemost
qui possit neque eam rationem reddere dictis. 175
  Nunc age, quam celeri motu simulacra ferantur
et quae mobilitas ollis tranantibus auras
reddita sit, longo spatio ut brevis hora teratur,
in quem quaeque locum diverso nomine tendunt,
suavidicis potius quam multis versibus edam; 180
parvus ut est cycni melior canor, ille gruum quam
clamor in aetheriis dispersus nubibus austri.
principio persaepe levis res atque minutis
corporibus factas celeris licet esse videre.
in quo iam genere est solis lux et vapor eius 185
propterea quia sunt e primis facta minutis
quae quasi cuduntur perque aëris intervallum
non dubitant transire sequenti concita plaga.
suppeditatur enim confestim lumine lumen
et quasi protelo stimulatur fulgere fulgur. 190
quapropter simulacra pari ratione necesse est
inmemorabile per spatium transcurrere posse
temporis in puncto, primum quod parvola causa
est procul a tergo quae provehat atque propellat,
quod superest, ubi tam volucri levitate ferantur; 195
deinde quod usque adeo textura praedita rara
mittuntur, facile ut quasvis penetrare queant res
et quasi permanare per aëris intervallum.
praeterea si, quae penitus corpuscula rerum
ex altoque foras mittuntur, solis uti lux 200
ac vapor, haec puncto cernuntur lapsa diei
per totum caeli spatium diffundere sese
perque volare mare ac terras caelumque rigare,
quid quae sunt igitur iam prima fronte parata,

cum iaciuntur et emissum res nulla moratur? 205
quone vides citius debere et longius ire
multiplexque loci spatium transcurrere eodem
tempore quo solis pervolgant lumina caelum?
hoc etiam in primis specimen verum esse videtur
quam celeri motu rerum simulacra ferantur, 210
quod simul ac primum sub diu splendor aquai
ponitur, extemplo caelo stellante serena
sidera respondent in aqua radiantia mundi.
iamne vides igitur quam puncto tempore imago
aetheris ex oris in terrarum accidat oras? 215
quare etiam atque etiam mira fateare necessest

. . . .

corpora quae feriant oculos visumque lacessant.
perpetuoque fluunt certis ab rebus odores;
frigus ut a fluviis, calor ab sole, aestus ab undis
aequoris exesor moerorum litora circum.
nec variae cessant voces volitare per auras.
denique in os salsi venit umor saepe saporis,
cum mare versamur propter, dilutaque contra
cum tuimur misceri absinthia, tangit amaror.
usque adeo omnibus ab rebus res quaeque fluenter 225
fertur et in cunctas dimittitur undique partis
nec mora nec requies interdatur ulla fluendi,
perpetuo quoniam sentimus, et omnia semper
cernere odorari licet et sentire sonare.

Praeterea quoniam manibus tractata figura 230
in tenebris quaedam cognoscitur esse eadem quae
cernitur in luce et claro candore, necessest
consimili causa tactum visumque moveri.
nunc igitur si quadratum temptamus et id nos
commovet in tenebris, in luci quae poterit res 235
accidere ad speciem quadrata, nisi eius imago?
esse in imaginibus quapropter causa videtur
cernundi neque posse sine his res ulla videri.

nunc ea quae dico rerum simulacra feruntur
undique et in cunctas iaciuntur didita partis;
verum nos oculis quia solis cernere quimus,
propterea fit uti, speciem quo vertimus, omnes
res ibi eam contra feriant forma atque colore.
et quantum quaeque ab nobis res absit, imago
efficit ut videamus et internoscere curat; 245
nam cum mittitur, extemplo protrudit agitque
aëra qui inter se cumque est oculosque locatus,
isque ita per nostras acies perlabitur omnis
et quasi perterget pupillas atque ita transit.
propterea fit uti videamus quam procul absit 250
res quaeque. et quanto plus aëris ante agitatur
et nostros oculos perterget longior aura,
tam procul esse magis res quaeque remota videtur.
scilicet haec summe celeri ratione geruntur,
quale sit ut videamus et una quam procul absit. 255
illud in his rebus minime mirabile habendumst,
cur, ea quae feriant oculos simulacra videri
singula cum nequeant, res ipsae perspiciantur.
ventus enim quoque paulatim cum verberat et cum
acre fluit frigus, non privam quamque solemus 260
particulam venti sentire et frigoris eius,
sed magis unorsum, fierique perinde videmus
corpore tum plagas in nostro tam quam aliquae res
verberet atque sui det sensum corporis extra.
praeterea lapidem digito cum tundimus, ipsum 265
tangimus extremum saxi summumque colorem,
nec sentimus eum tactu, verum magis ipsam
duritiem penitus saxi sentimus in alto.

Nunc age, cur ultra speculum videatur imago
percipe; nam certe penitus semota videtur. 270
quod genus illa foris quae vere transpiciuntur,
ianua cum per se transpectum praebet apertum,
multa facitque foris ex aedibus ut videantur.

is quoque enim duplici geminoque fit aëre visus.
primus enim citra postes tum cernitur aër 275
inde fores ipsae dextra laevaque secuntur,
post extraria lux oculos perterget et aër
alter et illa foris quae vere transpiciuntur.
sic ubi se primum speculi proiecit imago,
dum venit ad nostras acies, protrudit agitque 280
aëra qui inter se cumquest oculosque locatus,
et facit ut prius hunc omnem sentire queamus [ipsum,
quam speculum. sed ubi speculum quoque sensimus
continuo a nobis in idem quae fertur imago
pervenit et nostros oculos reiecta revisit 285
atque alium prae se propellens aëra volvit
et facit ut prius hunc quam se videamus, eoque
distare ab speculo tantum semota videtur.
quare etiam atque etiam minime mirarier est par,
illic quor reddant speculorum ex aequore visum, 290
aëribus binis quoniam res confit utraque.
nunc ea quae nobis membrorum dextera pars est,
in speculis fit ut in laeva videatur eo quod
planitiem ad speculi veniens cum offendit imago,
non convertitur incolumis, sed recta retrorsum 295
sic eliditur, ut siquis, prius arida quam sit
cretea persona, adlidat pilaeve trabive,
atque ea continuo rectam si fronte figuram
servet et elisam retro sese exprimat ipsa.
fiet ita, ante oculus fuerit qui dexter, ut idem 300
nunc sit laevus, et e laevo sit mutua dexter.
fit quoque de speculo in speculum ut tradatur imago,
quinque etiam sexve ut fieri simulacra suërint.
nam quaecumque retro parte interiore latebunt,
inde tamen, quamvis torte penitusque remota, 305
omnia per flexos aditus educta licebit
pluribus haec speculis videantur in aedibus esse.
usque adeo speculo in speculum translucet imago, "reflect itself"

et cum laeva data est, fit rusum ut dextera fiat,
inde retro rursum redit et convertitur eodem. 310
quin etiam quaecumque latuscula sunt speculorum
adsimili lateris flexura praedita nostri,
dextera ea propter nobis simulacra remittunt,
aut quia de speculo in speculum transfertur imago,
inde ad nos elisa bis advolat, aut etiam quod 315
circum agitur, cum venit, imago propterea quod
flexa figura docet speculi convertier ad nos.
indugredi porro pariter simulacra pedemque
ponere nobiscum credas gestumque imitari
propterea quia, de speculi qua parte recedas, 320
continuo nequeunt illinc simulacra reverti;
omnia quandoquidem cogit natura referri
ac resilire ab rebus ad aequos reddita flexus.
  Splendida porro oculi fugitant vitantque tueri.
sol etiam caecat, contra si tendere pergas, 325
propterea quia vis magnast ipsius et alte
aëra per purum graviter simulacra feruntur
et feriunt oculos turbantia composituras.
praeterea splendor quicumque est acer adurit
saepe oculos ideo quod semina possidet ignis 330
multa, dolorem oculis quae gignunt insinuando.
lurida praeterea fiunt quaecumque tuentur
arquati, quia luroris de corpore eorum
semina multa fluunt simulacris obvia rerum,
multaque sunt oculis in eorum denique mixta, 335
quae contage sua palloribus omnia pingunt.
e tenebris autem quae sunt in luce tuemur
propterea quia, cum propior caliginis aër
ater init oculos prior et possedit apertos,
insequitur candens confestim lucidus aër 340
qui quasi purgat eos ac nigras discutit umbras
aëris illius; nam multis partibus hic est
mobilior multisque minutior et mage pollens.

qui simul atque vias oculorum luce replevit
atque patefecit quas ante obsederat aër 345
ater, continuo rerum simulacra secuntur
quae sita sunt in luce, lacessuntque ut videamus.
quod contra facere in tenebris e luce nequimus
propterea quia posterior caliginis aër
crassior insequitur qui cuncta foramina complet 350
obsiditque vias oculorum, ne simulacra
possint ullarum rerum coniecta movere.
quadratasque procul turris cum cernimus urbis,
propterea fit uti videantur saepe rutundae,
angulus optusus quia longe cernitur omnis 355
sive etiam potius non cernitur ac perit eius
plaga nec ad nostras acies perlabitur ictus,
aëra per multum quia dum simulacra feruntur,
cogit hebescere eum crebris offensibus aër.
hoc ubi suffugit sensum simul angulus omnis, 360
fit quasi ut ad tornum saxorum structa terantur;
non tamen ut coram quae sunt vereque rutunda,
sed quasi adumbratim paulum simulata videntur.
umbra videtur item nobis in sole moveri
et vestigia nostra sequi gestumque imitari; 365
aëra si credis privatum lumine posse
indugredi, motus hominum gestumque sequentem;
nam nil esse potest aliut nisi lumine cassus
aër id quod nos umbram perhibere suëmus.
nimirum quia terra locis ex ordine certis 370
lumine privatur solis quacumque meantes
officimus, repletur item quod liquimus eius,
propterea fit uti videatur, quae fuit umbra
corporis, e regione eadem nos usque secuta.
semper enim nova se radiorum lumina fundunt 375
primaque dispereunt, quasi in ignem lana trahatur.
propterea facile et spoliatur lumine terra
et repletur item nigrasque sibi abluit umbras.

Nec tamen hic oculos falli concedimus hilum
nam quocumque loco sit lux atque umbra tueri 380
illorum est; eadem vero sint lumina necne,
umbraque quae fuit hic eadem nunc transeat illuc,
an potius fiat paulo quod diximus ante,
hoc animi demum ratio discernere debet,
nec possunt oculi naturam noscere rerum. 385
proinde animi vitium hoc oculis adfingere noli.
qua vehimur navi, fertur, cum stare videtur;
quae manet in statione, ea praeter creditur ire.
et fugere ad puppim colles campique videntur
quos agimus praeter navem velisque volamus. 390
sidera cessare aetheriis adfixa cavernis
cuncta videntur, et adsiduo sunt omnia motu,
quandoquidem longos obitus exorta revisunt,
cum permensa suo sunt caelum corpore claro.
solque pari ratione manere et luna videntur 395
in statione, ea quae ferri res indicat ipsa.
exstantisque procul medio de gurgite montis
classibus inter quos liber patet exitus ingens,
insula coniunctis tamen ex his una videtur.
atria versari et circumcursare columnae 400
usque adeo fit uti pueris videantur, ubi ipsi
desierunt verti, vix ut iam credere possint
non supra sese ruere omnia tecta minari.
iamque rubrum tremulis iubar ignibus erigere alte
cum coeptat natura supraque extollere montes, 405
quos tibi tum supra sol montis esse videtur
comminus ipse suo contingens fervidus igni,
vix absunt nobis missus bis mille sagittae,
vix etiam cursus quingentos saepe veruti:
inter eos solemque iacent immania ponti 410
aequora substrata aetheriis ingentibus oris,
interiectaque sunt terrarum milia multa
quae variae retinent gentes et saecla ferarum.

at conlectus aquae digitum non altior unum,
qui lapides inter sistit per strata viarum, 415
despectum praebet sub terras inpete tanto,
a terris quantum caeli patet altus hiatus;
nubila dispicere et caelum ut videare videre
cetera mirando sub terras abdita caelo.
denique ubi in medio nobis ecus acer obhaesit 420
flumine et in rapidas amnis despeximus undas,
stantis equi corpus transversum ferre videtur
vis et in adversum flumen contrudere raptim,
et quocumque oculos traiecimus omnia ferri
et fluere adsimili nobis ratione videntur. 425
porticus aequali quamvis est denique ductu
stansque in perpetuum paribus suffulta columnis,
longa tamen parte ab summa cum tota videtur,
paulatim trahit angusti fastigia coni,
tecta solo iungens atque omnia dextera laevis 430
donec in obscurum coni conduxit acumen.
in pelago nautis ex undis ortus in undis
sol fit uti videatur obire et condere lumen;
quippe ubi nil aliud nisi aquam caelumque tuentur;
ne leviter credas labefactari undique sensus. 435
at maris ignaris in portu clauda videntur
navigia aplustris fractis obnitier undae.
nam quaecumque supra rorem salis edita pars est
remorum, recta est, et recta superne guberna:
quae demersa liquorem obeunt, refracta videntur 440
omnia converti sursumque supina reverti
et reflexa prope in summo fluitare liquore.
raraque per caelum cum venti nubila portant
tempore nocturno, tum splendida signa videntur
labier adversum nimbos atque ire superne 445
longe aliam in partem ac vera ratione feruntur.
at si forte oculo manus uni subdita supter
pressit eum, quodam sensu fit uti videantur

omnia quae tuimur fieri tum bina tuendo,
bina lucernarum florentia lumina flammis 450
binaque per totas aedis geminare supellex
et duplicis hominum facies et corpora bina.
denique cum suavi devinxit membra sopore
somnus et in summa corpus iacet omne quiete,
tum vigilare tamen nobis et membra movere 455
nostra videmur, et in noctis caligine caeca
cernere censemus solem lumenque diurnum,
conclusoque loco caelum mare flumina montis
mutare et campos pedibus transire videmur,
et sonitus audire, severa silentia noctis 460
undique cum constent, et reddere dicta tacentes.
cetera de genere hoc miracula multa videmus,
quae violare fidem quasi sensibus omnia quaerunt,
nequiquam, quoniam pars horum maxima fallit
propter opinatus animi quos addimus ipsi, 465
pro visis ut sint quae non sunt sensibu' visa.
nam nil aegrius est quam res secernere apertas
ab dubiis, animus quas ab se protinus addit.

Denique nil sciri siquis putat, id quoque nescit
an sciri possit, quoniam nil scire fatetur. 470
hunc igitur contra mittam contendere causam,
qui capite ipse sua in statuit vestigia sese.
et tamen hoc quoque uti concedam scire, at id ipsum
quaeram, cum in rebus veri nil viderit ante,
unde sciat quid sit scire et nescire vicissim, 475
notitiam veri quae res falsique crearit
et dubium certo quae res differre probarit.
invenies primis ab sensibus esse creatam
notitiem veri neque sensus posse refelli.
nam maiore fide debet reperirier illud, 480
sponte sua veris quod possit vincere falsa.
quid maiore fide porro quam sensus haberi
debet? an ab sensu falso ratio orta valebit

dicere eos contra, quae tota ab sensibus orta est?
qui nisi sunt veri, ratio quoque falsa fit omnis. 485
an poterunt oculos aures reprehendere, an aures
tactus? an hunc porro tactum sapor arguet oris,
an confutabunt nares oculive revincent?
non, ut opinor, ita est. nam seorsum cuique potestas
divisast, sua vis cuiquest, ideoque necesse est 490
et quod molle sit et gelidum fervensve seorsum
et seorsum varios rerum sentire colores
et quaecumque coloribu' sint coniuncta videre.
seorsus item sapor oris habet vim, seorsus odores
nascuntur, sorsum sonitus. ideoque necesse est 495
non possint alios alii convincere sensus.
nec porro poterunt ipsi reprehendere sese,
aequa fides quoniam debebit semper haberi.
proinde quod in quoquest his visum tempore, verumst.
et si non poterit ratio dissolvere causam, 500
cur ea quae fuerint iuxtim quadrata, procul sint
visa rutunda, tamen praestat rationis egentem
reddere mendose causas utriusque figurae,
quam manibus manifesta suis emittere quoquam
et violare fidem primam et convellere tota 505
fundamenta quibus nixatur vita salusque.
non modo enim ratio ruat omnis, vita quoque ipsa
concidat extemplo, nisi credere sensibus ausis
praecipitisque locos vitare et cetera quae sint. 510
illa tibi est igitur verborum copia cassa
omnis quae contra sensus instructa paratast.
denique ut in fabrica, si pravast regula prima,
normaque si fallax rectis regionibus exit,
et libella aliqua si ex parti claudicat hilum, 515
omnia mendose fieri atque obstipa necesse est
prava cubantia prona supina atque absona tecta,
iam ruere ut quaedam videantur velle, ruantque
prodita iudiciis fallacibus omnia primis,

sic igitur ratio tibi rerum prava necessest 520
falsaque sit, falsis quaecumque ab sensibus ortast.

Nunc alii sensus quo pacto quisque suam rem
sentiat, haudquaquam ratio scruposa relicta est.

Principio auditur sonus et vox omnis, in auris
insinuata suo pepulere ubi corpore sensum. 525
corpoream vocem quoque enim constare fatendumst
et sonitum, quoniam possunt inpellere sensus.
praeterea radit vox fauces saepe facitque
asperiora foras gradiens arteria clamor.
quippe per angustum turba maiore coorta 530
ire foras ubi coeperunt primordia vocum,
scilicet expleti quoque ianua raditur oris.
haud igitur dubiumst quin voces verbaque constent
corporeis e principiis, ut laedere possint.
nec te fallit item quid corporis auferat et quid 535
detrahat ex hominum nervis ac viribus ipsis
perpetuus sermo nigrai noctis ad umbram
aurorae perductus ab exoriente nitore,
praesertim si cum summost clamore profusus.
ergo corpoream vocem constare necessest, 540
multa loquens quoniam amittit de corpore partem.
asperitas autem vocis fit ab asperitate
principiorum et item levor levore creatur.
nec simili penetrant auris primordia forma,
cum tuba depresso graviter sub murmure mugit 545
et reboat raucum regio cita barbara bombum,
et validis cycni torrentibus ex Heliconis
cum liquidam tollunt lugubri voce querellam.

Hasce igitur penitus voces cum corpore nostro
exprimimus rectoque foras emittimus ore, 550
mobilis articulat verborum daedala lingua
formaturaque labrorum pro parte figurat.
hoc ubi non longum spatiumst unde una profecta
perveniat vox quaeque, necessest verba quoque ipsa

plane exaudiri discernique articulatim ; 555
servat enim formaturam servatque figuram.
at si interpositum spatium sit longius aequo,
aëra per multum confundi verba necessest
et conturbari vocem, dum transvolat auras.
ergo fit, sonitum ut possis sentire neque illam 560
internoscere, verborum sententia quae sit :
usque adeo confusa venit vox inque pedita.
praeterea verbum saepe unum perciet auris
omnibus in populo, missum praeconis ab ore.
in multas igitur voces vox una repente 565
diffugit, in privas quoniam se dividit auris
obsignans formam verbi clarumque sonorem.
at quae pars vocum non auris incidit ipsas,
praeterlata perit frustra diffusa per auras.
pars solidis adlisa locis reiecta sonorem 570
reddit et interdum frustratur imagine verbi.
quae bene cum videas, rationem reddere possis
tute tibi atque aliis, quo pacto per loca sola
saxa paris formas verborum ex ordine reddant,
palantis comites quom montis inter opacos 575
quaerimus et magna dispersos voce ciemus.
sex etiam aut septem loca vidi reddere vocis,
unam cum iaceres : ita colles collibus ipsi
verba repulsantes iterabant docta referri.
haec loca capripedes satyros nymphasque tenere 580
finitimi fingunt et faunos esse locuntur
quorum noctivago strepitu ludoque iocanti
adfirmant volgo taciturna silentia rumpi
chordarumque sonos fieri dulcisque querellas,
tibia quas fundit digitis pulsata canentum, 585
et genus agricolum late sentiscere, quom Pan
pinea semiferi capitis velamina quassans
unco saepe labro calamos percurrit hiantis,
fistula silvestrem ne cesset fundere musam.

cetera de genere hoc monstra ac portenta loquontur, 590
ne loca deserta ab divis quoque forte putentur
sola tenere. ideo iactant miracula dictis
aut aliqua ratione alia ducuntur, ut omne
humanum genus est avidum nimis auricularum.

Quod superest, non est mirandum qua ratione, 595
per loca quae nequeunt oculi res cernere apertas,
haec loca per voces veniant aurisque lacessant.
conloquium clausis foribus quoque saepe videmus,
nimirum quia vox per flexa foramina rerum
incolumis transire potest, simulacra renutant; 600
perscinduntur enim, nisi recta foramina tranant,
qualia sunt vitrei, species qua travolat omnis.
praeterea partis in cunctas dividitur vox,
ex aliis aliae quoniam gignuntur, ubi una
dissuluit semel in multas exorta, quasi ignis 605
saepe solet scintilla suos se spargere in ignis.
ergo replentur loca vocibus, abdita retro
omnia quae circum fervunt sonituque cientur.
at simulacra viis derectis omnia tendunt
ut sunt missa semel; quapropter cernere nemo 610
saepem ultra potis est, at voces accipere extra.
et tamen ipsa quoque haec, dum transit clausa domorum,
vox optunditur atque auris confusa penetrat
et sonitum potius quam verba audire videmur.

Nec, qui sentimus sucum, lingua atque palatum 615
plusculum habent in se rationis plus operaeve.
principio sucum sentimus in ore, cibum cum
mandendo exprimimus, ceu plenam spongiam aquai
siquis forte manu premere ac siccare coëpit.
inde quod exprimimus per caulas omne palati 620
diditur et rarae perplexa foramina linguae.
hoc ubi levia sunt manantis corpora suci,
suaviter attingunt et suaviter omnia tractant
umida linguai circum sudantia templa.

at contra pungunt sensum lacerantque coorta, 625
quanto quaeque magis sunt asperitate repleta.
deinde voluptas est e suco fine palati;
cum vero deorsum per fauces praecipitavit,
nulla voluptas est, dum diditur omnis in artus.
nec refert quicquam quo victu corpus alatur, 630
dummodo quod capias concoctum didere possis
artubus et stomachi umidulum servare tenorem.

Nunc aliis alius qui sit cibu' suavis et almus
expediam, quareve, aliis quod triste et amarumst,
hoc tamen esse aliis possit perdulce videri, 635
tantaque in his rebus distantia differitasque,
ut quod ali cibus est aliis fuat acre venenum.
extetque ut serpens, hominis quae tacta salivis
disperit ac sese mandendo conficit ipsa.
praeterea nobis veratrum est acre venenum, 640
at capris adipes et coturnicibus auget.
ut quibus id fiat rebus cognoscere possis,
principio meminisse decet quae diximus ante,
semina multimodis in rebus mixta teneri.
porro omnes quaecumque cibum capiunt animantes, 645
ut sunt dissimiles extrinsecus et generatim
extima membrorum circumcaesura coercet,
proinde et seminibus constant variante figura.
semina cum porro distent, differre necessest
intervalla viasque, foramina quae perhibemus, 650
omnibus in membris et in ore ipsoque palato.
esse minora igitur quaedam maioraque debent,
esse triquetra aliis, aliis quadrata necessest,
multa rutunda, modis multis multangula quaedam.
namque figurarum ratio ut motusque reposcunt, 655
proinde foraminibus debent differre figurae,
et variare viae proinde ac textura coercet.
hoc ubi quod suave est aliis aliis fit amarum,
illi, cui suave est, levissima corpora debent

contractabiliter caulas intrare palati, 660
at contra quibus est eadem res intus acerba,
aspera nimirum penetrant hamataque fauces.
nunc facile est ex his rebus cognoscere quaeque.
quippe ubi cui febris bili superante coorta est
aut alia ratione aliquast vis excita morbi, 665
perturbatur ibi iam totum corpus et omnes
commutantur ibi positurae principiorum;
fit prius ad sensum ut quae corpora conveniebant
nunc non conveniant, et cetera sint magis apta,
quae penetrata queunt sensum progignere acerbum; 670
utraque enim sunt in mellis commixta sapore;
id quod iam supera tibi saepe ostendimus ante.

Nunc age quo pacto naris adiectus odoris
tangat agam. primum res multas esse necessest
unde fluens volvat varius se fluctus odorum, 675
et fluere et mitti volgo spargique putandumst;
verum aliis alius magis est animantibus aptus
dissimilis propter formas. ideoque per auras
mellis apes quamvis longe ducuntur odore,
volturiique cadaveribus. tum fissa ferarum 680
ungula quo tulerit gressum permissa canum vis
ducit, et humanum longe praesentit odorem
Romulidarum arcis servator candidus anser.
sic aliis alius nidor datus ad sua quemque
pabula ducit et a taetro resilire veneno 685
cogit, eoque modo servantur saecla ferarum.

Hic odor ipse igitur, naris quicumque lacessit,
est alio ut possit permitti longius alter;
sed tamen haud quisquam tam longe fertur eorum
quam sonitus, quam vox, mitto iam dicere quam res 690
quae feriunt oculorum acies visumque lacessunt.
errabundus enim tarde venit ac perit ante
paulatim facilis distractus in aëris auras;
ex alto primum quia vix emittitur ex re:

nam penitus fluere atque recedere rebus odores 695
significat quod fracta magis redolere videntur
omnia, quod contrita, quod igni conlabefacta:
deinde videre licet maioribus esse creatum
principiis quam vox, quoniam per saxea saepta
non penetrat, qua vox volgo sonitusque feruntur. 700
quare etiam quod olet non tam facile esse videbis
investigare in qua sit regione locatum;
refrigescit enim cunctando plaga per auras
nec calida ad sensum decurrunt nuntia rerum.
errant saepe canes itaque et vestigia quaerunt. 705

[Nec tamen hoc solis in odoribus atque saporum
in generest, sed item species rerum atque colores
non ita conveniunt ad sensus omnibus omnes,
ut non sint aliis quaedam magis acria visu.
quin etiam gallum, noctem explaudentibus alis 710
auroram clara consuetum voce vocare,
noenu queunt rabidi contra constare leones
inque tueri: ita continuo meminere fugai,
nimirum quia sunt gallorum in corpore quaedam
semina, quae cum sunt oculis inmissa leonum, 715
pupillas interfodiunt acremque dolorem
praebent, ut nequeant contra durare feroces;
cum tamen haec nostras acies nil laedere possint,
aut quia non penetrant aut quod penetrantibus illis
exitus ex oculis liber datur, in remorando 720
laedere ne possint ex ulla lumina parte.]

Nunc age quae moveant animum res accipe, et unde
quae veniunt veniant in mentem percipe paucis.
principio hoc dico, rerum simulacra vagari
multa modis multis in cunctas undique partis 725
tenvia, quae facile inter se iunguntur in auris,
obvia cum veniunt, ut aranea bratteaque auri.
quippe etenim multo magis haec sunt tenvia textu
quam quae percipiunt oculos visumque lacessunt,

corporis haec quoniam penetrant per rara cientque 730
tenvem animi naturam intus sensumque lacessunt.
Centauros itaque et Scyllarum membra videmus
Cerbereasque canum facies simulacraque eorum
quorum morte obita tellus amplectitur ossa;
omne genus quoniam passim simulacra feruntur, 735
partim sponte sua quae fiunt aëre in ipso,
partim quae variis ab rebus cumque recedunt
et quae confiunt ex horum facta figuris.
nam certe ex vivo Centauri non fit imago,
nulla fuit quoniam talis natura animantis; 740
verum ubi equi atque hominis casu convenit imago,
haerescit facile extemplo, quod diximus ante,
propter subtilem naturam et tenvia texta.
cetera de genere hoc eadem ratione creantur.
quae cum mobiliter summa levitate feruntur, 745
ut prius ostendi, facile uno commovet ictu
quaelibet una animum nobis subtilis imago;
tenvis enim mens est et mire mobilis ipsa.

Haec fieri ut memoro, facile hinc cognoscere possis.
quatenus hoc simile est illi, quod mente videmus 750
atque oculis, simili fieri ratione necesse est.
nunc igitur docui quoniam me forte leonem
cernere per simulacra, oculos quaecumque lacessunt,
scire licet mentem simili ratione moveri,
per simulacra leonem et cetera quae videt aeque 755
nec minus atque oculi, nisi quod mage tenvia cernit.
nec ratione alia, cum somnus membra profudit,
mens animi vigilat, nisi quod simulacra lacessunt
haec eadem nostros animos quae cum vigilamus,
usque adeo, certe ut videamur cernere eum quem 760
rellicta vita iam mors et terra potitast.
hoc ideo fieri cogit natura, quod omnes
corporis offecti sensus per membra quiescunt
nec possunt falsum veris convincere rebus.

praeterea meminisse iacet languetque sopore 765
nec dissentit eum mortis letique potitum
iam pridem, quem mens vivom se cernere credit.
quod superest, non est mirum simulacra moveri
bracchiaque in numerum iactare et cetera membra;
nam fit ut in somnis facere hoc videatur imago; 770
quippe ubi prima perit alioque est altera nata
inde statu, prior hic gestum mutasse videtur.
scilicet id fieri celeri ratione putandumst:
tanta est mobilitas et rerum copia tanta
tantaque sensibili quovis est tempore in uno 775
copia particularum, ut possit suppeditare.

[Multaque in his rebus quaeruntur multaque nobis
clarandumst, plane si res exponere avemus.
quaeritur in primis quare, quod cuique libido
venerit, extemplo mens cogitet eius id ipsum. 780
anne voluntatem nostram simulacra tuentur
et simul ac volumus nobis occurrit imago,
si mare, si terrast cordi, si denique caelum?
conventus hominum pompam convivia pugnas,
omnia sub verbone creat natura paratque? 785
cum praesertim aliis eadem in regione locoque
longe dissimilis animus res cogitet omnis.
quid porro, in numerum procedere cum simulacra
cernimus in somnis et mollia membra movere,
mollia mobiliter cum alternis bracchia mittunt 790
et repetunt oculis gestum pede convenienti?
scilicet arte madent simulacra et docta vagantur,
nocturno facere ut possint in tempore ludos.
an magis illud erit verum? quia tempore in uno,
cum sentimus id, et cum vox emittitur una, 795
tempora multa latent, ratio quae comperit esse,
propterea fit uti quovis in tempore quaeque
praesto sint simulacra locis in quisque parata.
et quia tenvia sunt, nisi quae contendit, acute 802

cernere non potis est animus; proinde omnia quae sunt
praeterea pereunt, nisi siquae ad se ipse paravit.
ipse parat sese porro speratque futurum 805
ut videat quod consequitur rem quamque; fit ergo.
nonne vides oculos etiam, cum tenvia quae sunt
cernere coeperunt, contendere se atque parare,
nec sine eo fieri posse ut cernamus acute? 810
et tamen in rebus quoque apertis noscere possis,
si non advertas animum, proinde esse quasi omni
tempore semotum fuerit longeque remotum.
cur igitur mirumst, animus si cetera perdit
praeterquam quibus est in rebus deditus ipse? 815
deinde adopinamur de signis maxima parvis
ac nos in fraudem induimus frustraminis ipsi.]

Fit quoque ut interdum non suppeditetur imago
eiusdem generis, sed femina quae fuit ante,
in manibus vir uti factus videatur adesse, 820
aut alia ex alia facies aetasque sequatur.
quod ne miremur sopor atque oblivia curant.

[Illud in his rebus vitium vementer avessis
effugere, errorem vitareque praemetuenter,
lumina ne facias oculorum clara creata, 825
prospicere ut possemus, et ut proferre queamus
proceros passus, ideo fastigia posse
surarum ac feminum pedibus fundata plicari,
bracchia tum porro validis ex apta lacertis
esse manusque datas utraque ex parte ministras, 830
ut facere ad vitam possemus quae foret usus.
cetera de genere hoc inter quaecumque pretantur,
omnia perversa praepostera sunt ratione,
nil ideo quoniam natumst in corpore ut uti
possemus, sed quod natumst id procreat usum. 835
nec fuit ante videre oculorum lumina nata
nec dictis orare prius quam lingua creatast,
sed potius longe linguae praecessit origo

sermonem multoque creatae sunt prius aures
quam sonus est auditus, et omnia denique membra 840
ante fuere, ut opinor, eorum quam foret usus;
haud igitur potuere utendi crescere causa.
at contra conferre manu certamina pugnae
et lacerare artus foedareque membra cruore
ante fuit multo quam lucida tela volarent, 845
et volnus vitare prius natura coegit
quam daret obiectum parmai laeva per artem.
scilicet et fessum corpus mandare quieti
multo antiquius est quam lecti mollia strata,
et sedare sitim prius est quam pocula natum. 850
haec igitur possunt utendi cognita causa
credier, ex usu quae sunt vitaque reperta.
illa quidem seorsum sunt omnia quae prius ipsa
nata dedere suae post notitiam utilitatis.
quo genere in primis sensus et membra videmus; 855
quare etiam atque etiam procul est ut credere possis
utilitatis ob officium potuisse creari.]

[Illud item non est mirandum, corporis ipsa
quod natura cibum quaerit cuiusque animantis.
quippe etenim fluere atque recedere corpora rebus 860
multa modis multis docui, sed plurima debent
ex animalibu'. quae quia sunt exercita motu,
multaque per sudorem ex alto pressa feruntur,
multa per os exhalantur, cum languida anhelant,
his igitur rebus rarescit corpus et omnis 865
subruitur natura; dolor quam consequitur rem.
propterea capitur cibus ut suffulciat artus
et recreet vires interdatus atque patentem
per membra ac venas ut amorem opturet edendi.
umor item discedit in omnia quae loca cumque 870
poscunt umorem; glomeratque multa vaporis
corpora, quae stomacho praebent incendia nostro,
dissupat adveniens liquor ac restinguit ut ignem,

urere ne possit calor amplius aridus artus.
sic igitur tibi anhela sitis de corpore nostro 875
abluitur, sic expletur ieiuna cupido.]

Nunc qui fiat uti passus proferre queamus,
cum volumus, varieque datum sit membra movere,
et quae res tantum hoc oneris protrudere nostri
corporis insuerit, dicam: tu percipe dicta. 880
dico animo nostro primum simulacra meandi
accidere atque animum pulsare, ut diximus ante.
inde voluntas fit; neque enim facere incipit ullam
rem quisquam, quam mens providit quid velit ante.
id quod providet, illius rei constat imago. 885
ergo animus cum sese ita commovet ut velit ire
inque gredi, ferit extemplo quae in corpore toto
per membra atque artus animai dissita vis est.
et facilest factu, quoniam coniuncta tenetur.
inde ea proporro corpus ferit, atque ita tota 890
paulatim moles protruditur atque movetur.
praeterea tum rarescit quoque corpus et aër,
scilicet ut debet qui semper mobilis extat,
per patefacta venit penetratque foramina largus
et dispargitur ad partis ita quasque minutas 895
corporis. hic igitur rebus fit utrimque duabus,
corporis ut ac navis velis ventoque feratur.
nec tamen illud in his rebus mirabile constat,
tantula quod tantum corpus corpuscula possunt
contorquere et onus totum convertere nostrum. 900
quippe etenim ventus suptili corpore tenvis
trudit agens magnam magno molimine navem
et manus una regit quantovis impete euntem
atque gubernaclum contorquet quolibet unum,
multaque per trocleas et tympana pondere magno 905
commovet atque levi sustollit machina nisu.

Nunc quibus ille modis somnus per membra quietem
inriget atque animi curas e pectore solvat,

suavidicis potius quam multis versibus edam;
parvus ut est cycni melior canor, ille gruum quam 910
clamor in aetheriis dispersus nubibus austri.
tu mihi da tenuis aures animumque sagacem,
ne fieri negites quae dicam posse retroque
vera repulsanti discedas pectore dicta,
tutimet in culpa cum sis neque cernere possis. 915
principio somnus fit ubi est distracta per artus
vis animae partimque foras eiecta recessit
et partim contrusa magis concessit in altum;
dissoluuntur enim tum demum membra fluuntque.
nam dubium non est, animai quin opera sit 920
sensus hic in nobis, quem cum sopor inpedit esse,
tum nobis animam perturbatam esse putandumst
eiectamque foras; non omnem; namque iaceret
aeterno corpus perfusum frigore leti.
quippe ubi nulla latens animai pars remaneret 925
in membris, cinere ut multa latet obrutus ignis,
unde reconflari sensus per membra repente
posset, ut ex igni caeco consurgere flamma?
Sed quibus haec rebus novitas confiat et unde
perturbari anima et corpus languescere possit, 930
expediam: tu fac ne ventis verba profundam.
principio externa corpus de parte necessum est,
aëriis quoniam vicinum tangitur auris,
tundier atque eius crebro pulsarier ictu,
proptereaque fere res omnes aut corio sunt 935
aut etiam conchis aut callo aut cortice tectae.
interiorem etiam partem spirantibus aër
verberat hic idem, cum ducitur atque reflatur.
quare utrimque secus cum corpus vapulet et cum
perveniant plagae per parva foramina nobis 940
corporis ad primas partis elementaque prima,
fit quasi paulatim nobis per membra ruina.
conturbantur enim positurae principiorum

corporis atque animi. fit uti pars inde animai
eiciatur et introrsum pars abdita cedat, 945
pars etiam distracta per artus non queat esse
coniuncta inter se neque motu mutua fungi;
inter enim saepit coetus natura viasque;
ergo sensus abit mutatis motibus alte.
et quoniam non est quasi quod suffulciat artus, 950
debile fit corpus languescuntque omnia membra,
bracchia palpebraeque cadunt poplitesque cubanti
saepe tamen summittuntur virisque resolvunt.
deinde cibum sequitur somnus, quia, quae facit aër,
haec eadem cibus, in venas dum diditur omnis, 955
efficit. et multo sopor ille gravissimus exstat
quem satur aut lassus capias, quia plurima tum se
corpora conturbant magno contusa labore.
fit ratione eadem coniectus partim animai
altior atque foras eiectus largior eius, 960
et divisior inter se ac distractior in test.

Et quo quisque fere studio devinctus adhaeret
aut quibus in rebus multum sumus ante morati
atque in ea ratione fuit contenta magis mens,
in somnis eadem plerumque videmur obire; 965
causidici causas agere et componere leges,
induperatores pugnare ac proelia obire,
nautae contractum cum ventis degere bellum,
nos agere hoc autem et naturam quaerere rerum
semper et inventam patriis exponere chartis. 970
cetera sic studia atque artes plerumque videntur
in somnis animos hominum frustrata tenere.
et quicumque dies multos ex ordine ludis
adsiduas dederunt operas, plerumque videmus,
cum iam destiterunt ea sensibus usurpare, 975
relicuas tamen esse vias in mente patentis,
qua possint eadem rerum simulacra venire.
per multos itaque illa dies eadem obversantur

ante oculos, etiam vigilantes ut videantur
cernere saltantis et mollia membra moventis 980
et citharae liquidum carmen chordasque loquentis
auribus accipere et consessum cernere eundem
scenaique simul varios splendere decores.
usque adeo magni refert studium atque voluptas,
et quibus in rebus consuerint esse operati 985
non homines solum sed vero animalia cuncta.
quippe videbis equos fortis, cum membra iacebunt,
in somnis sudare tamen spirareque semper
et quasi de palma summas contendere viris
aut quasi carceribus patefactis 990
venantumque canes in molli saepe quiete
iactant crura tamen subito vocesque repente
mittunt et crebro redducunt naribus auras,
ut vestigia si teneant inventa ferarum,
expergefactique secuntur inania saepe 995
cervorum simulacra, fugae quasi dedita cernant,
donec discussis redeant erroribus ad se.
at consueta domi catulorum blanda propago
discutere et corpus de terra corripere instant 999
proinde quasi ignotas facies atque ora tuantur. 1004
et quo quaeque magis sunt aspera seminiorum,
tam magis in somnis eadem saevire necessust.
at variae fugiunt volucres pinnisque repente
sollicitant divom nocturno tempore lucos,
accipitres somno in leni si proelia pugnas
edere sunt persectantes visaeque volantes. 1010
porro hominum mentes, magnis quae motibus edunt
magna, itidem saepe in somnis faciuntque geruntque,
reges expugnant, capiuntur, proelia miscent,
tollunt clamorem quasi si iugulentur ibidem.
multi depugnant gemitusque doloribus edunt 1015
et quasi pantherae morsu saevive leonis
mandantur magnis clamoribus omnia complent.

multi de magnis per somnum rebu' loquuntur
indicioque sui facti persaepe fuere.
multi mortem obeunt. multi, de montibus altis 1020
ut qui praecipitent ad terram corpore toto,
externantur et ex somno quasi mentibu' capti
vix ad se redeunt permoti corporis aestu.
flumen item sitiens aut fontem propter amoenum
adsidet et totum prope faucibus occupat amnem. 1025
puri saepe lacum propter si ac dolia curta
somno devincti credunt se extollere vestem,
totius umorem saccatum corpori' fundunt,
cum Babylonica magnifico splendore rigantur.
tum quibus aetatis freta primitus insinuatur 1030
semen, ubi ipsa dies membris matura creavit,
conveniunt simulacra foris e corpore quoque
nuntia praeclari voltus pulchrique coloris,
qui ciet inritans loca turgida semine multo,
ut quasi transactis saepe omnibu' rebu' profundant 1035
fluminis ingentis fluctus vestemque cruentent.

Sollicitatur id in nobis, quod diximus ante
semen, adulta aetas cum primum roborat artus.
namque alias aliud res commovet atque lacessit;
ex homine humanum semen ciet una hominis vis. 1040
quod simul atque suis eiectum sedibus exit,
per membra atque artus decedit corpore toto
in loca conveniens nervorum certa cietque
continuo partis genitalis corporis ipsas.
inritata tument loca semine fitque voluntas 1045
eicere id quo se contendit dira lubido,
idque petit corpus, mens unde est saucia amore.
namque omnes plerumque cadunt in vulnus et illam
emicat in partem sanguis unde icimur ictu, 1050
et si comminus est, hostem ruber occupat umor.
sic igitur Veneris qui telis accipit ictus,
sive puer membris muliebribus hunc iaculatur

seu mulier toto iactans e corpore amorem,
unde feritur, eo tendit gestitque coire 1055
et iacere umorem in corpus de corpore ductum.
namque voluptatem praesagit muta cupido.

Haec Venus est nobis; hinc autemst nomen amoris,
hinc illaec primum Veneris dulcedinis in cor
stillavit gutta et successit frigida cura. 1060
nam si abest quod aves, praesto simulacra tamen sunt
illius et nomen dulce obversatur ad auris.
sed fugitare decet simulacra et pabula amoris
absterrere sibi atque alio convertere mentem
et iacere umorem conlectum in corpora quaeque 1065
nec retinere semel conversum unius amore,
et servare si' curam certumque dolorem.
ulcus enim vivescit et inveterascit alendo
inque dies gliscit furor atque aerumna gravescit,
si non prima novis conturbes volnera plagis 1070
volgivagaque vagus Venere ante recentia cures
aut alio possis animi traducere motus.

Nec Veneris fructu caret is qui vitat amorem,
sed potius quae sunt sine poena commoda sumit;
nam certe purast sanis magis inde voluptas 1075
quam miseris. etenim potiundi tempore in ipso
fluctuat incertis erroribus ardor amantum
nec constat quid primum oculis manibusque fruantur.
quod petiere, premunt arte faciuntque dolorem
corporis et dentes inlidunt saepe labellis 1080
osculaque adfligunt, quia non est pura voluptas
et stimuli subsunt qui instigant laedere id ipsum
quodcumque est, rabies unde illaec germina surgunt.
sed leviter poenas frangit Venus inter amorem
blandaque refrenat morsus admixta voluptas. 1085
namque in eo spes est, unde est ardoris origo,
restingui quoque posse ab eodem corpore flammam.
quod fieri contra totum natura repugnat;

unaque res haec est, cuius quom quam plurima habemus,
tum magis ardescit dira cuppedine pectus. 1090
nam cibus atque umor membris adsumitur intus ;
quae quoniam certas possunt obsidere partis,
hoc facile expletur laticum frugumque cupido.
ex hominis vero facie pulchroque colore
nil datur in corpus praeter simulacra fruendum 1095
tenvia ; quae vento spes raptast saepe misella.
ut bibere in somnis sitiens quom quaerit et umor
non datur, ardorem qui membris stinguere possit,
sed laticum simulacra petit frustraque laborat
in medioque sitit torrenti flumine potans, 1100
sic in amore Venus simulacris ludit amantis
nec satiare queunt spectando corpora coram
nec manibus quicquam teneris abradere membris
possunt errantes incerti corpore toto.
denique cum membris conlatis flore fruuntur 1105
aetatis, iam cum praesagit gaudia corpus
atque in eost Venus ut muliebria conserat arva,
adfigunt avide corpus iunguntque salivas
oris et inspirant pressantes dentibus ora,
nequiquam, quoniam nil inde abradere possunt 1110
nec penetrare et abire in corpus corpore toto ;
nam facere interdum velle et certare videntur :
usque adeo cupide in Veneris compagibus haerent,
membra voluptatis dum vi labefacta liquescunt.
tandem ubi se erupit nervis conlecta cupido, 1115
parva fit ardoris violenti pausa parumper.
inde redit rabies eadem et furor ille revisit,
cum sibi quid cupiant ipsi contingere quaerunt,
nec reperire malum id possunt quae machina vincat :
usque adeo incerti tabescunt volnere caeco. 1120

Adde quod absumunt viris pereuntque labore,
adde quod alterius sub nutu degitur aetas.
labitur interea res et Babylonica fiunt,

languent officia atque aegrotat fama vacillans.
huic lenta et pulchra in pedibus Sicyonia rident 1125
scilicet et grandes viridi cum luce zmaragdi
auro includuntur teriturque thalassina vestis
adsidue et Veneris sudorem exercita potat.
et bene parta patrum fiunt anademata, mitrae,
interdum in pallam atque Alidensia Ciaque vertunt. 1130
eximia veste et victu convivia, ludi,
pocula crebra, unguenta coronae serta parantur,
nequiquam, quoniam medio de fonte leporum
surgit amari aliquit quod in ipsis floribus angat,
aut cum conscius ipse animus se forte remordet 1135
desidiose agere aetatem lustrisque perire,
aut quod in ambiguo verbum iaculata reliquit
quod cupido adfixum cordi vivescit ut ignis,
aut nimium iactare oculos aliumve tueri
quod putat in voltuque videt vestigia risus. 1140
Atque in amore mala haec proprio summeque secundo
inveniuntur: in adverso vero atque inopi sunt,
prendere quae possis oculorum lumine operto,
innumerabilia; ut melius vigilare sit ante,
qua docui ratione, cavereque ne inliciaris. 1145
nam vitare, plagas in amoris ne iaciamur,
non ita difficile est quam captum retibus ipsis
exire et validos Veneris perrumpere nodos.
et tamen implicitus quoque possis inque peditus
effugere infestum, nisi tute tibi obvius obstes 1150
et praetermittas animi vitia omnia primum
aut quae corpori' sunt eius, siquam petis ac vis.
nam faciunt homines plerumque cupidine caeci
et tribuunt ea quae non sunt his commoda vere.
multimodis igitur pravas turpisque videmus 1155
esse in deliciis summoque in honore vigere.
atque alios alii inrident Veneremque süadent
ut placent, quoniam foedo adflictentur amore,

nec sua respiciunt miseri mala maxima saepe.
nigra melichrus est, inmunda et fetida acosmos, 1160
caesia Palladium, nervosa et lignea dorcas,
parvula, pumilio, chariton mia, tota merum sal,
magna atque inmanis cataplexis plenaque honoris.
balba loqui non quit, traulizi, muta pudens est;
at flagrans odiosa loquacula Lampadium fit. 1165
ischnon eromenion tum fit, cum vivere non quit
prae macie; rhadine verost iam mortua tussi.
at tumida et mammosa Ceres est ipsa ab Iaccho,
simula Silena ac saturast, labeosa philema.
cetera de genere hoc longum est si dicere coner. 1170
sed tamen esto iam quantovis oris honore,
cui Veneris membris vis omnibus exoriatur:
nempe aliae quoque sunt; nempe hac sine viximus ante;
nempe eadem facit, et scimus facere, omnia turpi,
et miseram taetris se suffit odoribus ipsa 1175
quam famulae longe fugitant furtimque cachinnant.
at lacrimans exclusus amator limina saepe
floribus et sertis operit postisque superbos
unguit amaracino et foribus miser oscula figit;
quem si, iam ammissum, venientem offenderit aura 1180
una modo, causas abeundi quaerat honestas,
et meditata diu cadat alte sumpta querella,
stultitiaque ibi se damnet, tribuisse quod illi
plus videat quam mortali concedere par est.
nec Veneres nostras hoc fallit; quo magis ipsae 1185
omnia summo opere hos vitae poscaenia celant
quos retinere volunt adstrictosque esse in amore,
nequiquam, quoniam tu animo tamen omnia possis
protrahere in lucem atque omnis inquirere risus
et, si bello animost et non odiosa, vicissim 1190
pratermittere et humanis concedere rebus.

Nec mulier semper ficto suspirat amore
quae complexa viri corpus cum corpore iungit

et tenet adsuctis umectans oscula labris.
nam facit ex animo saepe et communia quaerens 1195
gaudia sollicitat spatium decurrere amoris.
nec ratione alia volucres armenta feraeque
et pecudes et equae maribus subsidere possent,
si non, ipsa quod illorum subat ardet abundans
natura et Venerem salientum laeta retractat. 1200
nonne vides etiam quos mutua saepe voluptas
vinxit, ut in vinclis communibus excrucientur?
in triviis quam saepe canes, discedere aventis,
divorsi cupide summis ex viribu' tendunt,
quom interea validis Veneris compagibus haerent! 1205
quod facerent numquam nisi mutua gaudia nossent
quae iacere in fraudem possent vinctosque tenere.
quare etiam atque etiam, ut dico, est communi' voluptas.

Et commiscendo quom semine forte virili
femina vim vicit subita vi corripuitque, 1210
tum similes matrum materno semine fiunt,
ut patribus patrio. sed quos utriusque figurae
esse vides, iuxtim miscentes vulta parentum,
corpore de patrio et materno sanguine crescunt,
semina cum Veneris stimulis excita per artus 1215
obvia conflixit conspirans mutuus ardor,
et neque utrum superavit eorum nec superatumst.
fit quoque ut interdum similes existere avorum
possint et referant proavorum saepe figuras
propterea quia multa modis primordia multis 1220
mixta suo celant in corpore saepe parentis,
quae patribus patres tradunt ab stirpe profecta;
inde Venus varia producit sorte figuras
maiorumque refert voltus vocesque comasque.
et muliebre oritur patrio de semine saeclum 1227
fiunt quam facies et corpora membraque nobis,
maternoque mares existunt corpore creti;
quandoquidem nilo magis haec de semine certo 1225

semper enim partus duplici de semine constat,
atque utri similest magis id quodcumque creatur, 1230
eius habet plus parte aequa; quod cernere possis,
sive virum suboles sivest muliebris origo.

Nec divina satum genitalem numina cuiquam
absterrent, pater a gnatis ne dulcibus umquam
appelletur et ut sterili Venere exigat aevom; 1235
quod plerumque putant et multo sanguine maesti
conspergunt aras adolentque altaria donis,
ut gravidas reddant uxores semine largo.
nequiquam divom numen sortisque fatigant.
nam steriles nimium crasso sunt semine partim 1240
et liquido praeter iustum tenuique vicissim.
tenve locis quia non potis est adfigere adhaesum,
liquitur extemplo et revocatum cedit abortu.
crassius his porro quoniam concretius aequo
mittitur, aut non tam prolixo provolat ictu 1245
aut penetrare locos aeque nequit aut penetratum
aegre admiscetur muliebri semine semen.
nam multum harmoniae Veneris differre videntur.
atque alias alii complent magis ex aliisque
succipiunt aliae pondus magis inque gravescunt. 1250
et multae steriles Hymenaeis ante fuerunt
pluribus et nactae post sunt tamen unde puellos
suscipere et partu possent ditescere dulci.
et quibus ante domi fecundae saepe nequissent
uxores parere, inventast illis quoque compar 1255
natura, ut possent gnatis munire senectam.
usque adeo magni refert, ut semina possint
seminibus commisceri genitaliter apta,
crassane conveniant liquidis et liquida crassis.
atque in eo refert quo victu vita colatur; 1260
namque aliis rebus concrescunt semina membris
atque aliis extenvantur tabentque vicissim.
et quibus ipsa modis tractetur blanda voluptas,

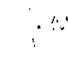
id quoque permagni refert ; nam more ferarum
quadrupedumque magis ritu plerumque putantur 1265
concipere uxores, quia sic loca sumere possunt,
pectoribus positis, sublatis semina lumbis.
nec molles opu' sunt motus uxoribus hilum.
nam mulier prohibet se concipere atque repugnat,
clunibus ipsa viri Venerem si laeta retractat 1270
atque exossato ciet omni pectore fluctus ;
eicit enim sulcum recta regione viaque
vomeris atque locis avertit seminis ictum.
idque sua causa consuerunt scorta moveri,
ne complerentur crebro gravidaeque iacerent 1275
et simul ipsa viris Venus ut concinnior esset ;
coniugibus quod nil nostris opus esse videtur.
Nec divinitus interdum Venerisque sagittis
deteriore fit ut forma muliercula ametur.
nam facit ipsa suis interdum femina factis 1280
morigerisque modis et munde corpore culto,
ut facile insuescat te secum degere vitam.
quod superest, consuetudo concinnat amorem ;
nam leviter quamvis quod crebro tunditur ictu,
vincitur in longo spatio tamen atque labascit. 1285
nonne vides etiam guttas in saxa cadentis
umoris longo in spatio pertundere saxa?



T. LUCRETI CARI

DE RERUM NATURA

LIBER QUINTUS.

Quis potis est dignum pollenti pectore carmen
condere pro rerum maiestate hisque repertis?
quisve valet verbis tantum qui fingere laudes
pro meritis eius possit qui talia nobis
pectore parta suo quaesitaque praemia liquit? 5
nemo, ut opinor, erit mortali corpore cretus.
nam si, ut ipsa petit maiestas cognita rerum,
dicendum est, deus ille fuit, deus, inclyte Memmi,
qui princeps vitae rationem invenit eam quae
nunc appellatur sapientia, quique per artem 10
fluctibus e tantis vitam tantisque tenebris
in tam tranquillo et tam clara luce locavit.

confer enim divina aliorum antiqua reperta.
namque Ceres fertur fruges Liberque liquoris
vitigeni laticem mortalibus instituisse; 15
cum tamen his posset sine rebus vita manere,
ut fama est aliquas etiam nunc vivere gentis.
at bene non poterat sine puro pectore vivi;
quo magis hic merito nobis deus esse videtur,
ex quo nunc etiam per magnas didita gentis 20
dulcia permulcent animos solacia vitae.
Herculis antistare autem si facta putabis,
longius a vera multo ratione ferere.



quid Nemeaeus enim nobis nunc magnus hiatus
ille leonis obesset et horrens Arcadius sus? 25
denique quid Cretae taurus Lernaeaque pestis
hydra venenatis posset vallata colubris?
quidve tripectora tergemini vis Geryonai

. . . .

tanto opere officerent nobis Stymphala colentes,
et Diomedis equi spirantes naribus ignem 30
Thracis Bistoniasque plagas atque Ismara propter?
aureaque Hesperidum servans fulgentia mala,
asper, acerba tuens, immani corpore serpens
arboris amplexus stirpem quid denique obesset
propter Atlanteum litus pelageque sonora 35
quo neque noster adit quisquam nec barbarus audet?
cetera de genere hoc quae sunt portenta perempta,
sei non victa forent, quid tandem viva nocerent?
nil, ut opinor: ita ad satiatem terra ferarum
nunc etiam scatit et trepido terrore repleta est 40
per nemora ac montes magnos silvasque profundas;
quae loca vitandi plerumque est nostra potestas.
at nisi purgatumst pectus, quae proelia nobis
atque pericula tumst ingratis insinuandum!
quantae tum scindunt hominem cuppedinis acres 45
sollicitum curae quantique perinde timores!
quidve superbia spurcitia ac petulantia? quantas
efficiunt clades! quid luxus desidiaeque?
haec igitur qui cuncta subegerit ex animoque
expulerit dictis, non armis, nonne decebit 50
hunc hominem numero divom dignarier esse?
cum bene praesertim multa ac divinitus ipsis
immortalibu' de divis dare dicta suërit
atque omnem rerum naturam pandere dictis.

Cuius ego ingressus vestigia dum rationes 55
persequor ac doceo dictis, quo quaeque creata
foedere sint, in eo quam sit durare necessum

nec validas valeant aevi rescindere leges,
quo genere in primis animi natura reperta est
nativo primum consistere corpore creta 60
nec posse incolumis magnum durare per aevom,
sed simulacra solere in somnis fallere mentem,
cernere cum videamur eum quem vita reliquit,
quod superest, nunc huc rationis detulit ordo,
ut mihi mortali consistere corpore mundum 65
nativomque simul ratio reddunda sit esse;
et quibus ille modis congressus materiai
fundarit terram caelum mare sidera solem
lunaique globum; tum quae tellure animantes
extiterint, et quae nullo sint tempore natae; 70
quove modo genus humanum variante loquella
coeperit inter se vesci per nomina rerum;
et quibus ille modis divom metus insinuarit
pectora, terrarum qui in orbi sancta tuetur
fana lacus lucos aras simulacraque divom. 75
praeterea solis cursus lunaeque meatus
expediam qua vi flectat natura gubernans;
ne forte haec inter caelum terramque reamur
libera sponte sua cursus lustrare perennis
morigera ad fruges augendas atque animantis, 80
neve aliqua divom volvi ratione putemus.
nam bene qui didicere deos securum agere aevom,
si tamen interea mirantur qua ratione
quaeque geri possint, praesertim rebus in illis
quae supera caput aetheriis cernuntur in oris, 85
rursus in antiquas referuntur religiones
et dominos acris adsciscunt, omnia posse
quos miseri credunt, ignari quid queat esse,
quid nequeat, finita potestas denique cuique
quanam sit ratione atque alte terminus haerens. 90

Quod superest, ne te in promissis plura moremur,
principio maria ac terras caelumque tuere;

quorum naturam triplicem, tria corpora, Memmi,
tris species tam dissimilis, tria talia texta,
una dies dabit exitio, multosque per annos 95
sustentata ruet moles et machina mundi.
nec me animi fallit quam res nova miraque menti
accidat exitium caeli terraeque futurum,
et quam difficile id mihi sit pervincere dictis;
ut fit ubi insolitam rem adportes auribus ante 100
nec tamen hanc possis oculorum subdere visu
nec iacere indu manus, via qua munita fidei
proxima fert humanum in pectus templaque mentis.
sed tamen effabor. dictis dabit ipsa fidem res
forsitan et graviter terrarum motibus ortis 105
omnia conquassari in parvo tempore cernes.
quod procul a nobis flectat fortuna gubernans,
et ratio potius quam res persuadeat ipsa
succidere horrisono posse omnia victa fragore.
[Qua prius adgrediar quam de re fundere fata 110
sanctius et multo certa ratione magis quam
Pythia quae tripode a Phoebi lauroque profatur,
multa tibi expediam doctis solacia dictis;
religione refrenatus ne forte rearis
terras et solem et caelum, mare sidera lunam, 115
corpore divino debere aeterna manere,
proptereaque putes ritu par esse Gigantum
pendere eos poenas inmani pro scelere omnis
qui ratione sua disturbent moenia mundi
praeclarumque velint caeli restinguere solem 120
inmortalia mortali sermone notantes;
quae procul usque adeo divino a numine distent,
inque deum numero quae sint indigna videri,
notitiam potius praebere ut posse putentur
quid sit vitali motu sensuque remotum. 125
quippe etenim non est, cum quovis corpore ut esse
posse animi natura putetur consiliumque;

sicut in aethere non arbor, non aequore salso
nubes esse queunt neque pisces vivere in arvis
nec cruor in lignis neque saxis sucus inesse. 130
certum ac dispositumst ubi quicquit crescat et insit.
sic animi natura nequit sine corpore oriri
sola neque a nervis et sanguine longiter esse.
quod si — posset enim multo prius — ipsa animi vis
in capite aut umeris aut imis calcibus esse 135
posset et innasci quavis in parte, soleret
tandem in eodem homine atque in eodem vase manere.
quod quoniam nostro quoque constat corpore certum
dispositumque videtur ubi esse et crescere possit
seorsum anima atque animus, tanto magis infitiandum 140
totum posse extra corpus formamque animalem
putribus in glebis terrarum aut solis in igni
aut in aqua durare aut altis aetheris oris.
haud igitur constant divino praedita sensu,
quandoquidem nequeunt vitaliter esse animata. 145

Illud item non est ut possis credere, sedes
esse deum sanctas in mundi partibus ullis.
tenvis enim natura deum longeque remota
sensibus ab nostris animi vix mente videtur;
quae quoniam manuum tactum suffugit et ictum, 150
tactile nil nobis quod sit contingere debet.
tangere enim non quit quod tangi non licet ipsum.
quare etiam sedes quoque nostris sedibus esse
dissimiles debent, tenues de corpore eorum;
quae tibi posterius largo sermone probabo. 155
dicere porro hominum causa voluisse parare
praeclaram mundi naturam proptereaque
adlaudabile opus divom laudare decere
aeternumque putare atque inmortale futurum
nec fas esse, deum quod sit ratione vetusta 160
gentibus humanis fundatum perpetuo aevo,
sollicitare suis ulla vi ex sedibus umquam

nec verbis vexare et ab imo evertere summa,
cetera de genere hoc adfingere et addere, Memmi,
desiperest. quid enim inmortalibus atque beatis 165
gratia nostra queat largirier emolumenti,
ut nostra quicquam causa gerere adgrediantur?
quidve novi potuit tanto post ante quietos
inlicere ut cuperent vitam mutare priorem?
nam gaudere novis rebus debere videtur 170
cui veteres obsunt; sed cui nil accidit aegri
tempore in anteacto, cum pulchre degeret aevom,
quid potuit novitatis amorem accendere tali?
an, credo, in tenebris vita ac maerore iacebat,
donec diluxit rerum genitalis origo. 175
quidve mali fuerat nobis non esse creatis?
natus enim debet quicumque est velle manere
in vita, donec retinebit blanda voluptas.
qui numquam vero vitae gustavit amorem
nec fuit in numero, quid obest non esse creatum? 180
exemplum porro gignundis rebus et ipsa
notities divis hominum unde est insita primum
quid vellent facere ut scirent animoque viderent,
quove modost umquam vis cognita principiorum
quidque inter sese permutato ordine possent, 185
si non ipsa dedit specimen natura creandi?
namque ita multa modis multis primordia rerum
ex infinito iam tempore percita plagis
ponderibusque suis consuerunt concita ferri
omnimodisque coire atque omnia pertemptare, 190
quaecumque inter se possent congressa creare,
ut non sit mirum si in talis disposituras
deciderunt quoque et in talis venere meatus,
qualibus haec rerum geritur nunc summa novando.

Quod si iam rerum ignorem primordia quae sint, 195
hoc tamen ex ipsis caeli rationibus ausim
confirmare aliisque ex rebus reddere multis,

nequaquam nobis divinitus esse paratam
naturam rerum: tanta stat praedita culpa.
principio quantum caeli tegit impetus ingens, 200
inde avidei partem montes silvaeque ferarum
possedere, tenent rupes vastaeque paludes
et mare quod late terrarum distinet oras.
inde duas porro prope partis fervidus ardor
adsiduusque geli casus mortalibus aufert. 205
quod superest arvi, tamen id natura sua vi
sentibus obducat, ni vis humana resistat
vitai causa valido consueta bidenti
ingemere et terram pressis proscindere aratris.
si non fecundas vertentes vomere glebas 210
terraique solum subigentes cimus ad ortus,
sponte sua nequeant liquidas existere in auras,
et tamen interdum magno quaesita labore
cum iam per terras frondent atque omnia florent,
aut nimiis torret fervoribus aetherius sol 215
aut subiti peremunt imbris gelidaeque pruinae,
flabraque ventorum violento turbine vexant.
praeterea genus horriferum natura ferarum
humanae genti infestum terraque marique
cur alit atque auget? cur anni tempora morbos 220
adportant? quare mors inmatura vagatur?
tum porro puer, ut saevis proiectus ab undis
navita, nudus humi iacet, infans, indigus omni
vitali auxilio, cum primum in luminis oras
nixibus ex alvo matris natura profudit, 225
vagituque locum lugubri complet, ut aecumst
cui tantum in vita restet transire malorum.
at variae crescunt pecudes armenta feraeque
nec crepitacillis opus est nec cuiquam adhibendast
almae nutricis blanda atque infracta loquella 230
nec varias quaerunt vestes pro tempore caeli,
denique non armis opus est, non moenibus altis,

qui sua tutentur, quando omnibus omnia large
tellus ipsa parit naturaque daedala rerum.]
Principio quoniam terrai corpus et umor 235
aurarumque leves animae calidique vapores,
e quibus haec rerum consistere summa videtur,
omnia nativo ac mortali corpore constant,
debet eodem omnis mundi natura putari.
quippe etenim quorum partis et membra videmus 240
corpore nativo ac mortalibus esse figuris,
haec eadem ferme mortalia cernimus esse
et nativa simul. quapropter maxima mundi
cum videam membra ac partis consumpta regigni,
scire licet caeli quoque item terraeque fuisse 245
principiale aliquod tempus clademque futuram.
Illud in his rebus ne corripuisse rearis
me mihi, quod terram atque ignem mortalia sumpsi
esse neque umorem dubitavi aurasque perire
atque eadem gigni rursusque augescere dixi, 250
principio pars terrai nonnulla, perusta
solibus adsiduis, multa pulsata pedum vi,
pulveris exhalat nebulam nubesque volantis
quas validi toto dispergunt aëre venti.
pars etiam glebarum ad diluviem revocatur 255
imbribus et ripas radentia flumina rodunt.
praeterea pro parte sua, quodcumque alid auget,
redditur; et quoniam dubio procul esse videtur
omniparens eadem rerum commune sepulcrum,
ergo terra tibi libatur et aucta recrescit. 260
Quod superest, umore novo mare flumina fontes
semper abundare et latices manare perennis
nil opus est verbis: magnus decursus aquarum
undique declarat. sed primum quicquid aquai
tollitur in summaque fit ut nil umor abundet, 265
partim quod validi verrentes aequora venti
diminuunt radiisque retexens aetherius sol,

partim quod supter per terras diditur omnis;
percolatur enim virus retroque remanat
materies umoris et ad caput amnibus omnis 270
convenit, inde super terras fluit agmine dulci
qua via secta semel liquido pede detulit undas.
Aëra nunc igitur dicam qui corpore toto
innumerabiliter privas mutatur in horas.
semper enim, quodcumque fluit de rebus, id omne 275
aëris in magnum fertur mare; qui nisi contra
corpora retribuat rebus recreetque fluentis,
omnia iam resoluta forent et in aëra versa.
haut igitur cessat gigni de rebus et in res
reccidere, adsidue quoniam fluere omnia constat. 280
Largus item liquidi fons luminis, aetherius sol,
inrigat adsidue caelum candore recenti
suppeditatque novo confestim lumine lumen.
nam primum quicquid fulgoris disperit ei,
quocumque accidit. id licet hinc cognoscere possis, 285
quod simul ac primum nubes succedere soli
coepere et radios inter quasi rumpere lucis,
extemplo inferior pars horum disperit omnis
terraque inumbratur qua nimbi cumque feruntur;
ut noscas splendore novo res semper egere 290
et primum iactum fulgoris quemque perire
nec ratione alia res posse in sole videri,
perpetuo ni suppeditet lucis caput ipsum.
quin etiam nocturna tibi, terrestria quae sunt,
lumina, pendentes lychini claraeque coruscis 295
fulguribus pingues multa caligine taedae
consimili properant ratione, ardore ministro,
suppeditare novom lumen, tremere ignibus instant,
instant, nec loca lux inter quasi rupta relinquit;
usque adeo properanter ab omnibus ignibus ei 300
exitium celeri celatur origine flammae.
sic igitur solem lunam stellasque putandumst

ex alio atque alio lucem iactare subortu
et primum quicquid flammarum perdere semper;
inviolabilia haec ne credas forte vigere. 305
  Denique non lapides quoque vinci cernis ab aevo,
non altas turris ruere et putrescere saxa,
non delubra deum simulacraque fessa fatisci,
nec sanctum numen fati protollere finis
posse neque adversus naturae foedera niti? 310
denique non monimenta virum dilapsa videmus
quaerere proporro sibi sene senescere credas
non ruere avolsos silices a montibus altis
nec validas aevi vires perferre patique
finiti? neque enim caderent avolsa repente, 315
ex infinito quae tempore pertolerassent
omnia tormenta aetatis privata fragore.
  Denique iam tuere hoc, circum supraque quod omnem
continet amplexu terram: si procreat ex se
omnia, quod quidam memorant, recipitque perempta, 320
totum nativum mortali corpore constat.
nam quodcumque alias ex se res auget alitque,
deminui debet, recreari, cum recipit res.
  Praeterea si nulla fuit genitalis origo
terrarum et caeli semperque aeterna fuere, 325
cur supera bellum Thebanum et funera Troiae
non alias alii quoque res cecinere poetae?
quo tot facta virum totiens cecidere neque usquam
aeternis famae monimentis insita florent?
verum, ut opinor, habet novitatem summa recensque 330
naturast mundi neque pridem exordia cepit.
quare etiam quaedam nunc artes expoliuntur,
nunc etiam augescunt; nunc addita navigiis sunt
multa, modo organici melicos peperere sonores.
denique natura haec rerum ratioque repertast 335
nuper, et hanc primus cum primis ipse repertus
nunc ego sum in patrias qui possim vertere voces.

quod si forte fuisse antehac eadem omnia credis,
sed periisse hominum torrenti saecla vapore,
aut cecidisse urbis magno vexamine mundi, 340
aut ex imbribus adsiduis exisse rapaces
per terras amnes atque oppida cooperuisse,
tanto quique magis victus fateare necessest
exitium quoque terrarum caelique futurum.
nam cum res tantis morbis tantisque periclis 345
temptarentur, ibi si tristior incubuisset
causa, darent late cladem magnasque ruinas.
nec ratione alia mortales esse videmur,
inter nos nisi quod morbis aegrescimus isdem
atque illi quos a vita natura removit. 350

Praeterea quaecumque manent aeterna necessust
aut, quia sunt solido cum corpore, respuere ictus
nec penetrare pati sibi quicquam quod queat artas
dissociare intus partis, ut materiai
corpora sunt quorum naturam ostendimus ante, 355
aut ideo durare aetatem posse per omnem,
plagarum quia sunt expertia, sicut inane est
quod manet intactum neque ab ictu fungitur hilum,
aut etiam quia nulla loci fit copia circum,
quo quasi res possint discedere dissoluique, 360
sicut summarum summa est aeterna neque extra
qui locus est quo dissiliant neque corpora sunt quae
possint incidere et valida dissolvere plaga.
at neque, uti docui, solido cum corpore mundi
naturast, quoniam admixtumst in rebus inane, 365
nec tamen est ut inane, neque autem corpora desunt,
ex infinito quae possint forte coorta
corruere hanc rerum violento turbine summam
aut aliam quamvis cladem inportare pericli,
nec porro natura loci spatiumque profundi 370
deficit, exspargi quo possint moenia mundi,
aut alia quavis possunt vi pulsa perire.

haut igitur leti praeclusa est ianua caelo
nec soli terraeque neque altis aequoris undis,
sed patet immani et vasto respectat hiatu. 375
quare etiam nativa necessumst confiteare
haec eadem ; neque enim, mortali corpore quae sunt,
ex infinito iam tempore adhuc potuissent
inmensi validas aevi contemnere vires.

Denique tantopere inter se cum maxima mundi 380
pugnent membra, pio nequaquam concita bello,
nonne vides aliquam longi certaminis ollis
posse dari finem? vel cum sol et vapor omnis
omnibus epotis umoribus exsuperarint :
quod facere intendunt, neque adhuc conata patrantur : 385
tantum suppeditant amnes ultraque minantur
omnia diluviare ex alto gurgite ponti,
nequiquam, quoniam verrentes aequora venti
deminuunt radiisque retexens aetherius sol,
et siccare prius confidunt omnia posse 390
quam liquor incepti possit contingere finem.
tantum spirantes aequo certamine bellum
magnis inter se de rebus cernere certant,
cum semel interea fuerit superantior ignis
et semel, ut fama est, umor regnarit in arvis. 395
ignis enim superat et lambens multa perussit,
avia cum Phaëthonta rapax vis solis equorum
aethere raptavit toto terrasque per omnis.
at pater omnipotens ira tum percitus acri
magnanimum Phaëthonta repenti fulminis ictu 400
deturbavit equis in terram, solque cadenti
obvius aeternam succepit lampada mundi
disiectosque redegit equos iunxitque trementis,
inde suum per iter recreavit cuncta gubernans,
scilicet ut veteres Graium cecinere poetae. 405
quod procul a vera nimis est ratione repulsum.
ignis enim superare potest ubi materiai

ex infinito sunt corpora plura coorta;
inde cadunt vires aliqua ratione revictae,
aut pereunt res exustae torrentibus auris. 410
umor item quondam coepit superare coortus,
ut fama est, hominum multas quando obruit urbis.
inde ubi vis aliqua ratione aversa recessit,
ex infinito fuerat quaecumque coorta,
constiterunt imbres et flumina vim minuerunt. 415
Sed quibus ille modis coniectus materiai
fundarit terram et caelum pontique profunda,
solis lunai cursus, ex ordine ponam.
nam certe neque consilio primordia rerum
ordine se suo quaeque sagaci mente locarunt 420
nec quos quaeque darent motus pepigere profecto,
sed quia multa modis multis primordia rerum
ex infinito iam tempore percita plagis
ponderibusque suis consuerunt concita ferri
omnimodisque coire atque omnia pertemptare, 425
quaecumque inter se possent congressa creare,
propterea fit uti magnum volgata per aevom
omne genus coetus et motus ex periundo
tandem conveniant ea quae convecta repente
magnarum rerum fiunt exordia saepe, 430
terrai maris et caeli generisque animantum.
Hic neque tum solis rota cerni lumine largo
altivolans poterat nec magni sidera mundi
nec mare nec caelum nec denique terra neque aër
nec similis nostris rebus res ulla videri, 435
sed nova tempestas quaedam molesque coorta
omne genus de principiis, discordia quorum
intervalla vias conexus pondera plagas
concursus motus turbabat proelia miscens,
propter dissimilis formas variasque figuras 440
quod non omnia sic poterant coniuncta manere
nec motus inter sese dare convenientis.

diffugere inde loci partes coepere paresque
cum paribus iungi res et discludere mundum
membraque dividere et magnas disponere partes, 445
hoc est, a terris altum secernere caelum,
et sorsum mare uti secreto umore pateret,
seorsus item puri secretique aetheris ignes.
  Quippe etenim primum terrai corpora quaeque,
propterea quod erant gravia et perplexa, coibant 450
in medio atque imas capiebant omnia sedes;
quae quanto magis inter se perplexa coibant,
tam magis expressere ea quae mare sidera solem
lunamque efficerent et magni moenia mundi.
omnia enim magis haec e levibus atque rutundis 455
seminibus multoque minoribu' sunt elementis
quam tellus. ideo, per rara foramina, terrae
partibus erumpens primus se sustulit aether
ignifer et multos secum levis abstulit ignis,
non alia longe ratione ac saepe videmus, 460
aurea cum primum gemmantis rore per herbas
matutina rubent radiati lumina solis
exhalantque lacus nebulam fluviique perennes,
ipsaque ut interdum tellus fumare videtur;
omnia quae sursum cum conciliantur, in alto 465
corpore concreto subtexunt nubila caelum.
sic igitur tum se levis ac diffusilis aether
corpore concreto circumdatus undique flexit
et late diffusus in omnis undique partis
omnia sic avido complexu cetera saepsit. 470
hunc exordia sunt solis lunaeque secuta,
interutrasque globi quorum vertuntur in auris;
quae neque terra sibi adscivit nec maximus aether,
quod neque tam fuerunt gravia ut depressa sederent,
nec levia ut possent per summas labier oras, 475
et tamen interutrasque ita sunt ut corpora viva
versent et partes ut mundi totius extent;

quod genus in nobis quaedam licet in statione
membra manere, tamen cum sint ea quae moveantur.
his igitur rebus retractis terra repente, 480
maxuma qua nunc se ponti plaga caerula tendit,
succidit et salso suffudit gurgite fossas.
inque dies quanto circum magis aetheris aestus
et radii solis cogebant undique terram
verberibus crebris extrema ad limina in artum, 485
in medio ut propulsa suo condensa coiret,
tam magis expressus salsus de corpore sudor
augebat mare manando camposque natantis,
et tanto magis illa foras elabsa volabant
corpora multa vaporis et aëris altaque caeli 490
densebant procul a terris fulgentia templa.
sidebant campi, crescebant montibus altis
ascensus; neque enim poterant subsidere saxa
nec pariter tantundem omnes succumbere partis.

Sic igitur terrae concreto corpore pondus 495
constitit atque omnis mundi quasi limus in imum
confluxit gravis et subsedit funditus ut faex;
inde mare inde aër inde aether ignifer ipse
corporibus liquidis sunt omnia pura relicta,
et leviora aliis alia, et liquidissimus aether 500
atque levissimus aërias super influit auras,
nec liquidum corpus turbantibus aëris auris
commiscet; sinit haec violentis omnia verti
turbinibus, sinit incertis turbare procellis,
ipse suos ignis certo fert impete labens. 505
nam modice fluere atque uno posse aethera nisu
significat Pontos, mare certo quod fluit aestu
unum labendi conservans usque tenorem.

[Motibus astrorum nunc quae sit causa canamus.
principio magnus caeli si vortitur orbis, 510
ex utraque polum parti premere aëra nobis
dicendum est extraque tenere et claudere utrimque;

inde alium supra fluere atque intendere eodem
quo volvenda micant aeterni sidera mundi;
aut alium supter, contra qui subvehat orbem, 515
ut fluvios versare rotas atque haustra videmus.
est etiam quoque uti possit caelum omne manere
in statione, tamen cum lucida signa ferantur;
sive quod inclusi rapidi sunt aetheris aestus
quaerentesque viam circum versantur et ignes 520
passim per caeli volvunt Summania templa;
sive aliunde fluens alicunde extrinsecus aër
versat agens ignis; sive ipsi serpere possunt
quo cuiusque cibus vocat atque invitat euntis,
flammea per caelum pascentis corpora passim. 525
nam quid in hoc mundo sit eorum ponere certum
difficile est; sed quid possit fiatque per omne
in variis mundis varia ratione creatis,
id doceo plurisque sequor disponere causas,
motibus astrorum quae possint esse per omne; 530
e quibus una tamen sit in hoc quoque causa necessest
quae vegeat motum signis; sed quae sit earum
praecipere hautquaquamst pedetemtim progredientis.
  Terraque ut in media mundi regione quiescat,
evanescere paulatim et decrescere pondus 535
convenit, atque aliam naturam supter habere
ex ineunte aevo coniunctam atque uniter aptam
partibus aëriis mundi quibus insita vivit.
propterea non est oneri neque deprimit auras;
ut sua cuique homini nullo sunt pondere membra 540
nec caput est oneri collo nec denique totum
corporis in pedibus pondus sentimus inesse;
at quaecumque foris veniunt inpostaque nobis
pondera sunt laedunt, permulto saepe minora.
usque adeo magni refert quid quaeque obeat res. 545
sic igitur tellus non est aliena repente
allata atque auris aliunde obiecta alienis,

sed pariter prima concepta ab origine mundi
certaque pars eius, quasi nobis membra videntur.
praeterea grandi tonitru concussa repente, 550
terra supra quae se sunt concutit omnia motu;
quod facere haut ulla posset ratione, nisi esset
partibus aëriis mundi caeloque revincta.
nam communibus inter se radicibus haerent
ex ineunte aevo coniuncta atque uniter apta. 555
nonne vides etiam quam magno pondere nobis
sustineat corpus tenuissima vis animai
propterea quia tam coniuncta atque uniter apta est?
denique iam saltu pernici tollere corpus
quid potis est nisi vis animi quae membra gubernat? 560
iamne vides quantum tenuis natura valere
possit, ubi est coniuncta gravi cum corpore, ut aër
coniunctus terris et nobis est animi vis?

Nec nimio solis maior rota nec minor ardor
esse potest, nostris quam sensibus esse videtur. 565
nam quibus e spatiis cumque ignes lumina possunt
adicere et calidum membris adflare vaporem,
nil illa his intervallis de corpore libant
flammarum, nil ad speciem est contractior ignis.
proinde, calor quoniam solis lumenque profusum 570
perveniunt nostros ad sensus et loca mulcent,
forma quoque hinc solis debet filumque videri,
nil adeo ut possis plus aut minus addere, vere.
lunaque sive notho fertur loca lumine lustrans 575
sive suam proprio iactat de corpore lucem,
quidquid id est, nilo fertur maiore figura
quam, nostris oculis qua cernimus, esse videtur.
nam prius omnia, quae longe semota tuemur
aëra per multum, specie confusa videntur 580
quam minui filum. quapropter luna necesse est,
quandoquidem claram speciem certamque figuram
praebet, ut est oris extremis cumque notata

quantaque quantast hinc nobis videatur in alto.
postremo quoscumque vides hinc aetheris ignes; 585
quandoquidem quoscumque in terris cernimus ignes,
dum tremor est clarus, dum cernitur ardor eorum,
perparvom quiddam interdum mutare videtur
alteram utram in partem filum, quo longius absunt;
scire licet perquam pauxillo posse minores 590
esse vel exigua maioris parte brevique.

Illud item non est mirandum, qua ratione
tantulus ille queat tantum sol mittere lumen,
quod maria ac terras omnis caelumque rigando
compleat et calido perfundat cuncta vapore. 595
nam licet hinc mundi patefactum totius unum
largifluum fontem scatere atque erumpere lumen,
ex omni mundo quia sic elementa vaporis
undique conveniunt et sic coniectus eorum 600
confluit, ex uno capite hic ut profluat ardor.
nonne vides etiam quam late parvus aquai
prata riget fons interdum campisque redundet?
est etiam quoque uti non magno solis ab igni
aëra percipiat calidis fervoribus ardor, 605
opportunus ita est si forte et idoneus aër,
ut queat accendi parvis ardoribus ictus;
quod genus interdum segetes stipulamque videmus
accedere ex una scintilla incendia passim.
forsitan et rosea sol alte lampade lucens 610
possideat multum caecis fervoribus ignem
circum se, nullo qui sit fulgore notatus,
aestifer ut tantum radiorum exaugeat ictum.

Nec ratio solis simplex et certa patescit,
quo pacto aestivis e partibus aegocerotis 615
brumalis adeat flexus atque inde revertens
cancri se ut vertat metas ad solstitialis,
lunaque mensibus id spatium videatur obire,
annua sol in quo consumit tempora cursu.

non, inquam, simplex his rebus reddita causast. 620
nam fieri vel cum primis id posse videtur,
Democriti quod sancta viri sententia ponit,
quanto quaeque magis sint terram sidera propter,
tanto posse minus cum caeli turbine ferri.
evanescere enim rapidas illius et acris 625
imminui supter viris, ideoque relinqui
paulatim solem cum posterioribu' signis,
inferior multo quod sit quam fervida signa.
et magis hoc lunam: quanto demissior eius
cursus abest procul a caelo terrisque propinquat, 630
tanto posse minus cum signis tendere cursum.
flaccidiore etenim quanto iam turbine fertur
inferior quam sol, tanto magis omnia signa
hanc adipiscuntur circum praeterque feruntur.
propterea fit ut haec ad signum quodque reverti 635
mobilius videatur, ad hanc quia signa revisunt.
fit quoque ut e mundi tranversis partibus aër
alternis certo fluere alter tempore possit,
qui queat aestivis solem detrudere signis
brumalis usque ad flexus gelidumque rigorem, 640
et qui reiciat gelidis a frigoris umbris
aestiferas usque in partis et fervida signa.
et ratione pari lunam stellasque putandumst,
quae volvunt magnos in magnis orbibus annos,
aëribus posse alternis e partibus ire. 645
nonne vides etiam diversis nubila ventis
diversas ire in partis inferna supernis?
qui minus illa queant per magnos aetheris orbis
aestibus inter se diversis sidera ferri?

At nox obruit ingenti caligine terras, 650
aut ubi de longo cursu sol ultima caeli
impulit atque suos efflavit languidus ignis
concussos itere et labefactos aëre multo,
aut quia sub terras cursum convortere cogit

vis eadem, supra quae terras pertulit orbem. 655
Tempore item certo roseam Matuta per oras
aetheris auroram differt et lumina pandit,
aut quia sol idem, sub terras ille revertens,
anticipat caelum radiis accendere temptans,
aut quia conveniunt ignes et semina multa 660
confluere ardoris consuerunt tempore certo,
quae faciunt solis nova semper lumina gigni;
quod genus Idaeis fama est e montibus altis
dispersos ignis orienti lumine cerni,
inde coire globum quasi in unum et conficere orbem. 665
nec tamen illud in his rebus mirabile debet
esse, quod haec ignis tam certo tempore possunt
semina confluere et solis reparare nitorem.
multa videmus enim, certo quae tempore fiunt
omnibus in rebus. florescunt tempore certo 670
arbusta et certo dimittunt tempore florem.
nec minus in certo dentes cadere imperat aetas
tempore et inpubem molli pubescere veste
et pariter mollem malis demittere barbam.
fulmina postremo nix imbres nubila venti 675
non nimis incertis fiunt in partibus anni.
namque ubi sic fuerunt causarum exordia prima
atque ita res mundi cecidere ab origine prima,
consequë quoque iam redeunt ex ordine certo.
Crescere itemque dies licet et tabescere noctes, 680
et minui luces, cum sumant augmina noctes,
aut quia sol idem sub terras atque superne
imparibus currens amfractibus aetheris oras
partit et in partis non aequas dividit orbem,
et quod ab alterutra detraxit parte, reponit 685
eius in adversa tanto plus parte relatus,
donec ad id signum caeli pervenit, ubi anni
nodus nocturnas exaequat lucibus umbras.
nam, medio cursu flatus aquilonis et austri,

distinet aequato caelum discrimine metas 690
propter signiferi posituram totius orbis,
annua sol in quo concludit tempora serpens,
obliquo terras et caelum lumine lustrans,
ut ratio declarat eorum qui loca caeli
omnia dispositis signis ornata notarunt. 695
aut quia crassior est certis in partibus aër,
sub terris ideo tremulum iubar haesitat ignis
nec penetrare potest facile atque emergere ad ortus.
propterea noctes hiberno tempore longae
cessant, dum veniat radiatum insigne diei. 700
aut etiam, quia sic alternis partibus anni
tardius et citius consuerunt confluere ignes
qui faciunt solem certa desurgere parte,
propterea fit uti videantur dicere verum

Luna potest solis radiis percussa nitere 705
inque dies magis id lumen convertere nobis
ad speciem, quantum solis secedit ab orbi,
donique eum contra pleno bene lumine fulsit
atque oriens obitus eius super edita vidit;
inde minutatim retro quasi condere lumen 710
debet item, quanto propius iam solis ad ignem
labitur ex alia signorum parte per orbem;
ut faciunt, lunam qui fingunt esse pilai
consimilem cursusque viam sub sole tenere.
est etiam quare proprio cum lumine possit 715
volvier et varias splendoris reddere formas.
corpus enim licet esse aliud quod fertur et una
labitur omnimodis occursans officiensque
nec potis est cerni, quia cassum lumine fertur.
versarique potest, globus ut, si forte, pilai 720
dimidia ex parti candenti lumine tinctus,
versandoque globum variantis edere formas,
donique eam partem, quaecumque est ignibus aucta,

ad speciem vertit nobis oculosque patentis;
inde minutatim retro contorquet et aufert 725
luciferam partem glomeraminis atque pilai;
ut Babylonica Chaldaeum doctrina refutans
astrologorum artem contra convincere tendit,
proinde quasi id fieri nequeat quod pugnat uterque
aut minus hoc illo sit cur amplectier ausis. 730
denique cur nequeat semper nova luna creari
ordine formarum certo certisque figuris
inque dies privos aborisci quaeque creata
atque alia illius reparari in parte locoque,
difficilest ratione docere et vincere verbis, 735
ordine cum possint tam certo multa creari.
it ver et Venus, et Veneris praenuntius ante
pennatus graditur, zephyri vestigia propter
Flora quibus mater praespargens ante viai
cuncta coloribus egregiis et odoribus opplet. 740
inde loci sequitur calor aridus et comes una
pulverulenta Ceres et etesia flabra aquilonum.
inde autumnus adit, graditur simul Euhius Euan.
inde aliae tempestates ventique secuntur,
altitonans Volturnus et auster fulmine pollens. 745
tandem bruma nives adfert pigrumque rigorem
reddit; hiemps sequitur crepitans hanc dentibus algu.
quo minus est mirum si certo tempore luna
gignitur et certo deletur tempore rusus,
cum fieri possint tam certo tempore multa. 750

Solis item quoque defectus lunaeque latebras
pluribus e causis fieri tibi posse putandumst.
nam cur luna queat terram secludere solis
lumine et a terris altum caput obstruere ei,
obiciens caecum radiis ardentibus orbem; 755
tempore eodem aliut facere id non posse putetur
corpus quod cassum labatur lumine semper?
solque suos etiam dimittere languidus ignis

tempore cur certo nequeat recreareque lumen,
cum loca praeteriit flammis infesta per auras, 760
quae faciunt ignis interstingui atque perire?
et cur terra queat lunam spoliare vicissim
lumine et oppressum solem super ipsa tenere,
menstrua dum rigidas coni perlabitur umbras;
tempore eodem aliut nequeat succurrere lunae 765
corpus vel supra solis perlabier orbem,
quod radios interrumpat lumenque profusum?
et tamen ipsa suo si fulget luna nitore,
cur nequeat certa mundi languescere parte,
dum loca luminibus propriis inimica per exit? 770
Quod superest, quoniam magni per caerula mundi
qua fieri quicquid posset ratione resolvi,
solis uti varios cursus lunaeque meatus
noscere possemus quae vis et causa cieret, 775
quove modo possent offecto lumine obire
et neque opinantis tenebris obducere terras,
cum quasi conivent et aperto lumine rursum
omnia convisunt clara loca candida luce,
nunc redeo ad mundi novitatem et mollia terrae 780
arva, nova fetu quid primum in luminis oras
tollere et incertis crerint committere ventis.
Principio genus herbarum viridemque nitorem
terra dedit circum collis camposque per omnis,
florida fulserunt viridanti prata colore, 785
arboribusque datumst variis exinde per auras
crescendi magnum inmissis certamen habenis.
ut pluma atque pili primum saetaeque creantur
quadripedum membris et corpore pennipotentum,
sic nova tum tellus herbas virgultaque primum 790
sustulit, inde loci mortalia saecla creavit
multa modis multis varia ratione coorta.
nam neque de caelo cecidisse animalia possunt
nec terrestria de salsis exisse lacunis.

linquitur ut merito maternum nomen adepta 795
terra sit, e terra quoniam sunt cuncta creata.
multaque nunc etiam existunt animalia terris
imbribus et calido solis concreta vapore;
quo minus est mirum si tum sunt plura coorta
et maiora, nova tellure atque aethere adulta. 800
principio genus alituum variaeque volucres
ova relinquebant exclusae tempore verno,
folliculos ut nunc teretis aestate cicadae
lincunt sponte sua victum vitamque petentes.
tum tibi terra dedit primum mortalia saecla. 805
multus enim calor atque umor superabat in arvis.
hoc ubi quaeque loci regio opportuna dabatur,
crescebant uteri terram radicibus apti;
quos ubi tempore maturo patefecerat aestus
infantum fugiens umorem aurasque petessens, 810
convertebat ibi natura foramina terrae
et sucum venis cogebat fundere apertis
consimilem lactis, sicut nunc femina quaeque
cum peperit, dulci repletur lacte, quod omnis
impetus in mammas convertitur ille alimenti. 815
terra cibum pueris, vestem vapor, herba cubile
praebebat multa et molli lanugine abundans.
at novitas mundi nec frigora dura ciebat
nec nimios aestus nec magnis viribus auras.
omnia enim pariter crescunt et robora sumunt. 820

Quare etiam atque etiam maternum nomen adepta
terra tenet merito, quoniam genus ipsa creavit
humanum atque animal prope certo tempore fudit
omne quod in magnis bacchatur montibu' passim,
aëriasque simul volucres variantibu' formis. 825
sed quia finem aliquam pariendi debet habere,
destitit, ut mulier spatio defessa vetusto.
mutat enim mundi naturam totius aetas
ex alioque alius status excipere omnia debet,

nec manet ulla sui similis res: omnia migrant, 830
omnia commutat natura et vertere cogit.
namque aliut putrescit et aevo debile languet,
porro aliut clarescit et e contemptibus exit.
sic igitur mundi naturam totius aetas
mutat et ex alio terram status excipit alter; 835
quod potuit nequit, possit quod non tulit ante.

Multaque tum tellus etiam portenta creare
conatast mira facie membrisque coorta, [tum,
androgynum, interutrasque nec utrum, utrimque remo-
orba pedum partim, manuum viduata vicissim, 840
muta sine ore etiam, sine voltu caeca reperta,
vinctaque membrorum per totum corpus adhaesu,
nec facere ut possent quicquam nec cedere quoquam
nec vitare malum nec sumere quod foret usus.
cetera de genere hoc monstra ac portenta creabat, 845
nequiquam, quoniam natura absterruit auctum
nec potuere cupitum aetatis tangere florem
nec reperire cibum nec iungi per Veneris res.
multa videmus enim rebus concurrere debere,
ut propagando possint procudere saecla; 850
pabula primum ut sint, genitalia deinde per artus
semina qua possint membris manare remissis;
feminaque ut maribus coniungi possit, habere
mutua qui mutent inter se gaudia uterque.

Multaque tum interiisse animantum saecla necessest 855
nec potuisse propagando procudere prolem.
nam quaecumque vides vesci vitalibus auris,
aut dolus aut virtus aut denique mobilitas est
ex ineunte aevo genus id tutata reservans.
multaque sunt, nobis ex utilitate sua quae 860
commendata manent, tutelae tradita nostrae.
principio genus acre leonum saevaque saecla
tutatast virtus, volpes dolus et fuga cervos.
at levisomna canum fido cum pectore corda

et genus omne quod est veterino semine partum 865
lanigeraeque simul pecudes et bucera saecla
omnia sunt hominum tutelae tradita, Memmi.
nam cupide fugere feras pacemque secuta
sunt et larga suo sine pabula parta labore,
quae damus utilitatis eorum praemia causa. 870
at quis nil horum tribuit natura, nec ipsa
sponte sua possent ut vivere nec dare nobis
utilitatem aliquam quare pateremur eorum
praesidio nostro pasci genus esseque tutum,
scilicet haec aliis praedae lucroque iacebant 875
indupedita suis fatalibus omnia vinclis,
donec ad interitum genus id natura redegit.

Sed neque Centauri fuerunt, nec tempore in ullo
esse queunt duplici natura et corpore bino
ex alienigenis membris compacta, potestas 880
hinc illinc visque ut non sat par esse potissit.
id licet hinc quamvis hebeti cognoscere corde.
principio circum tribus actis impiger annis
floret ecus, puer hautquaquam; nam saepe etiam nunc
ubera mammarum in somnis lactantia quaeret. 885
post ubi ecum validae vires aetate senecta
membraque deficiunt fugienti languida vita,
tum demum puero illi aevo florente iuventas
occipit et molli vestit lanugine malas.
ne forte ex homine et veterino semine equorum 890
confieri credas Centauros posse neque esse,
aut rabidis canibus succinctas semimarinis
corporibus Scyllas et cetera de genere horum,
inter se quorum discordia membra videmus;
quae neque florescunt pariter nec robora sumunt 895
corporibus neque proiciunt aetate senecta
nec simili Venere ardescunt nec moribus unis
conveniunt, neque sunt eadem iucunda per artus.
quippe videre licet pinguescere saepe cicutae

barbigeras pecudes, homini quae est acre venenum. 900
flamma quidem vero cum corpora fulva leonum
tam soleat torrere atque urere quam genus omne
visceris in terris quodcumque et sanguinis extet,
qui fieri potuit, triplici cum corpore ut una,
prima leo, postrema draco, media ipsa, Chimaera 905
ore foras acrem flaret de corpore flammam?
quare etiam tellure nova caeloque recenti
talia qui fingit potuisse animalia gigni,
nixus in hoc uno novitatis nomine inani,
multa licet simili ratione effutiat ore, 910
aurea tum dicat per terras flumina vulgo
fluxisse et gemmis florere arbusta suësse
aut hominem tanto membrorum esse impete natum,
trans maria alta pedum nisus ut ponere posset
et manibus totum circum se vertere caelum. 915
nam quod multa fuere in terris semina rerum
tempore quo primum tellus animalia fudit,
nil tamen est signi mixtas potuisse creari
inter se pecudes compactaque membra animantum,
propterea quia quae de terris nunc quoque abundant 920
herbarum genera ac fruges arbustaque laeta
non tamen inter se possunt complexa creari,
sed res quaeque suo ritu procedit et omnes
foedere naturae certo discrimina servant.

At genus humanum multo fuit illud in arvis 925
durius, ut decuit, tellus quod dura creasset,
et maioribus et solidis magis ossibus intus
fundatum, validis aptum per viscera nervis,
nec facile ex aestu nec frigore quod caperetur
nec novitate cibi nec labi corporis ulla. 930
multaque per caelum solis volventia lustra
volgivago vitam tractabant more ferarum.
nec robustus erat curvi moderator aratri
quisquam, nec scibat ferro molirier arva

nec nova defodere in terram virgulta neque altis 935
arboribus veteres decidere falcibu' ramos.
quod sol atque imbres dederant, quod terra crearat
sponte sua, satis id placabat pectora donum.
glandiferas inter curabant corpora quercus
plerumque; et quae nunc hiberno tempore cernis 940
arbita puniceo fieri matura colore,
plurima tum tellus etiam maiora ferebat.
multaque praeterea novitas tum florida mundi
pabula dura tulit, miseris mortalibus ampla.
at sedare sitim fluvii fontesque vocabant, 945
ut nunc montibus e magnis decursus aquai
claru' citat late sitientia saecla ferarum.
denique nota vagi silvestria templa tenebant
nympharum, quibus e scibant umori' fluenta
lubrica proluvie larga lavere umida saxa, 950
umida saxa, super viridi stillantia musco,
et partim plano scatere atque erumpere campo.
necdum res igni scibant tractare neque uti
pellibus et spoliis corpus vestire ferarum,
sed nemora atque cavos montis silvasque colebant 955
et frutices inter condebant squalida membra
verbera ventorum vitare imbrisque coacti.
nec commune bonum poterant spectare neque ullis
moribus inter se scibant nec legibus uti.
quod cuique obtulerat praedae fortuna, ferebat 960
sponte sua sibi quisque valere et vivere doctus.
et Venus in silvis iungebat corpora amantum;
conciliabat enim vel mutua quamque cupido
vel violenta viri vis atque inpensa libido
vel pretium, glandes atque arbita vel pira lecta. 965
et manuum mira freti virtute pedumque
consectabantur silvestria saecla ferarum
missilibus saxis et magno pondere clavae;
multaque vincebant, vitabant pauca latebris;

saetigerisque pares subu' sic silvestria membra 970
nuda dabant terrae nocturno tempore capti,
circum se foliis ac frondibus involventes.
nec plangore diem magno solemque per agros
quaerebant pavidi palantes noctis in umbris,
sed taciti respectabant somnoque sepulti, 975
dum rosea face sol inferret lumina caelo.
a parvis quod enim consuerant cernere semper
alterno tenebras et lucem tempore gigni,
non erat ut fieri posset mirarier umquam
nec diffidere ne terras aeterna teneret 980
nox in perpetuum detracto lumine solis.
sed magis illud erat curae, quod saecla ferarum
infestam miseris faciebant saepe quietem.
eiectique domo fugiebant saxea tecta
spumigeri suis adventu validive leonis 985
atque intempesta cedebant nocte paventes
hospitibus saevis instrata cubilia fronde.

Nec nimio tum plus quam nunc mortalia saecla
dulcia linquebant labentis lumina vitae.
unus enim tum quisque magis deprensus eorum 990
pabula viva feris praebebat, dentibus haustus,
et nemora ac montis gemitu silvasque replebat
viva videns vivo sepeliri viscera busto.
at quos effugium servarat corpore adeso,
posterius tremulas super ulcera taetra tenentes 995
palmas horriferis accibant vocibus Orcum,
donique eos vita privarant vermina saeva
expertis opis, ignaros quid volnera vellent.
at non multa virum sub signis milia ducta
una dies dabat exitio nec turbida ponti 1000
aequora fligebant navis ad saxa virosque.
hic temere in cassum frustra mare saepe coortum
saevibat leviterque minas ponebat inanis,
nec poterat quemquam placidi pellacia ponti



subdola pellicere in fraudem ridentibus undis, 1005
improba naucleri ratio cum caeca iacebat.
tum penuria deinde cibi languentia leto
membra dabat, contra nunc rerum copia mersat.
illi inprudentes ipsi sibi saepe venenum
vergebant, nurui nunc dant sollertius ipsi. 1010

Inde casas postquam ac pellis ignemque pararunt,
et mulier coniuncta viro concessit in unum

. . . .

cognita sunt, prolemque ex se videre creatam,
tum genus humanum primum mollescere coepit.
ignis enim curavit ut alsia corpora frigus 1015
non ita iam possent caeli sub tegmine ferre,
et Venus inminuit viris puerique parentum
blanditiis facile ingenium fregere superbum.
tunc et amicitiem coeperunt iungere aventes
finitimi inter se nec laedere nec violari, 1020
et pueros commendarunt muliebreque saeclum,
vocibus et gestu cum balbe significarent
imbecillorum esse aecum misererier omnis.
nec tamen omnimodis poterat concordia gigni,
sed bona magnaque pars servabat foedera caste ; 1025
aut genus humanum iam tum foret omne peremptum
nec potuisset adhuc perducere saecla propago.

At varios linguae sonitus natura subegit
mittere et utilitas expressit nomina rerum,
non alia longe ratione atque ipsa videtur 1030
protrahere ad gestum pueros infantia linguae,
cum facit ut digito quae sint praesentia monstrent.
sentit enim vim quisque suam quoad possit abuti.
cornua nata prius vitulo quam frontibus extent,
illis iratus petit atque infestus inurget. 1035
at catuli pantherarum scymnique leonum
unguibus ac pedibus iam tum morsuque repugnant,
vix etiam cum sunt dentes unguesque creati.

alituum porro genus alis omne videmus
fidere et a pinnis tremulum petere auxiliatum. 1040
proinde putare aliquem tum nomina distribuisse
rebus et inde homines didicisse vocabula prima,
desiperest. nam cur hic posset cuncta notare
vocibus et varios sonitus emittere linguae,
tempore eodem alii facere id non quisse putentur? 1045
praeterea si non alii quoque vocibus usi
inter se fuerant, unde insita notities est
utilitatis et unde data est huic prima potestas,
quid vellet facere ut sciret animoque videret?
cogere item pluris unus victosque domare 1050
non poterat, rerum ut perdiscere nomina vellent.
nec ratione docere ulla suadereque surdis,
quid sit opus facto, facilest; neque enim paterentur
nec ratione ulla sibi ferrent amplius auris
vocis inauditos sonitus obtundere frustra. 1055
postremo quid in hac mirabile tantoperest re,
si genus humanum, cui vox et lingua vigeret,
pro vario sensu varia res voce notaret?
cum pecudes mutae, cum denique saecla ferarum
dissimilis soleant voces variasque ciere, 1060
cum metus aut dolor est et cum iam gaudia gliscunt.
quippe etenim licet id rebus cognoscere apertis.
inritata canum cum primum magna Molossum
mollia ricta fremunt duros nudantia dentes,
longe alio sonitu rabie restricta minantur, 1065
et cum iam latrant et vocibus omnia complent.
et catulos blande cum lingua lambere temptant
aut ubi eos iactant pedibus morsuque petentes
suspensis teneros imitantur dentibus haustus,
longe alio pacto gannitu vocis adulant, 1070
et cum deserti baubantur in aedibus aut cum
plorantis fugiunt summisso corpore plagas.
denique non hinnitus item differre videtur,

inter equas ubi equus florenti aetate iuvencus
pinnigeri saevit calcaribus ictus amoris, 1075
et fremitum patulis ubi naribus edit ad arma,
et cum sic alias concussis artibus hinnit?
prostremo genus alituum variaeque volucres,
accipitres atque ossifragae mergique marinis
fluctibus in salso victum vitamque petentes, 1080
longe alias alio iaciunt in tempore voces,
et quom de victu certant praedaeque repugnant.
et partim mutant cum tempestatibus una
raucisonos cantus, cornicum ut saecla vetusta
corvorumque greges ubi aquam dicuntur et imbris 1085
poscere et interdum ventos aurasque vocare.
ergo si varii sensus animalia cogunt,
muta tamen cum sint, varias emittere voces,
quanto mortalis magis aecumst tum potuisse
dissimilis alia atque alia res voce notare! 1090

[Illud in his rebus tacitus ne forte requiras,
fulmen detulit in terram mortalibus ignem
primitus, inde omnis flammarum diditur ardor.
multa videmus enim caelestibus inlita flammis
fulgere, cum caeli donavit plaga vapore. 1095
et ramosa tamen cum ventis pulsa vacillans
aestuat in ramos incumbens arboris arbor,
exprimitur validis extritus viribus ignis
et micat interdum flammai fervidus ardor,
mutua dum inter se rami stirpesque teruntur. 1100
quorum utrumque dedisse potest mortalibus ignem.
inde cibum coquere ac flammae mollire vapore
sol docuit, quoniam mitescere multa videbant
verberibus radiorum atque aestu victa per agros.

Inque dies magis hi victum vitamque priorem 1105
commutare novis monstrabant rebu' benigni,
ingenio qui praestabant et corde vigebant.
condere coeperunt urbis arcemque locare

praesidium reges ipsi sibi perfugiumque,
et pecus atque agros divisere atque dedere 1110
pro facie cuiusque et viribus ingenioque:
nam facies multum valuit viresque vigentes.
posterius res inventast aurumque repertum,
quod facile et validis et pulchris dempsit honorem;
divitioris enim sectam plerumque secuntur 1115
quamlubet et fortes et pulchro corpore creti.
quod siquis vera vitam ratione gubernet,
divitiae grandes homini sunt vivere parce
aequo animo; neque enim est umquam penuria parvi.
at claros homines voluerunt se atque potentes, 1120
ut fundamento stabili fortuna maneret
et placidam possent opulenti degere vitam,
nequiquam, quoniam ad summum succedere honorem
certantes iter infestum fecere viai,
et tamen e summo, quasi fulmen, deicit ictos 1125
invidia interdum contemptim in Tartara taetra;
invidia quoniam, ceu fulmine, summa vaporant
plerumque et quae sunt aliis magis edita cumque;
ut satius multo iam sit parere quietum
quam regere imperio res velle et regna tenere. 1130
proinde sine incassum defessi sanguine sudent,
angustum per iter luctantes ambitionis;
quandoquidem sapiunt alieno ex ore petuntque
res ex auditis potius quam sensibus ipsis,
nec magis id nunc est neque erit mox quam fuit ante. 1135
  Ergo regibus occisis subversa iacebat
pristina maiestas soliorum et sceptra superba,
et capitis summi praeclarum insigne cruentum
sub pedibus vulgi magnum lugebat honorem;
nam cupide conculcatur nimis ante metutum. 1140
res itaque ad summam faecem turbasque redibat,
imperium sibi cum ac summatum quisque petebat.
inde magistratum partim docuere creare

iuraque constituere, ut vellent legibus uti.
nam genus humanum, defessum vi colere aevom, 1145
ex inimicitiis languebat; quo magis ipsum
sponte sua cecidit sub leges artaque iura.
acrius ex ira quod enim se quisque parabat
ulcisci quam nunc concessumst legibus aequis,
hanc ob rem est homines pertaesum vi colere aevom. 1150
inde metus maculat poenarum praemia vitae.
circumretit enim vis atque iniuria quemque
atque, unde exortast, ad eum plerumque revertit,
nec facilest placidam ac pacatam degere vitam
qui violat factis communia foedera pacis. 1155
etsi fallit enim divom genus humanumque,
perpetuo tamen id fore clam diffidere debet;
quippe ubi se multi per somnia saepe loquentes
aut morbo delirantes protraxe ferantur
et celata mala in medium et peccata dedisse]. 1160

Nunc quae causa deum per magnas numina gentis
pervulgarit et ararum compleverit urbis
suscipiendaque curarit sollemnia sacra,
quae nunc in magnis florent sacra rebu' locisque,
unde etiam nunc est mortalibus insitus horror 1165
qui delubra deum nova toto suscitat orbi
terrarum et festis cogit celebrare diebus,
non ita difficilest rationem reddere verbis.
quippe etenim iam tum divom mortalia saecla
egregias animo facies vigilante videbant 1170
et magis in somnis mirando corporis auctu.
his igitur sensum tribuebant propterea quod
membra movere videbantur vocesque superbas
mittere pro facie praeclara et viribus amplis.
aeternamque dabant vitam, quia semper eorum 1175
subpeditabatur facies et forma manebat,
et tamen omnino quod tantis viribus auctos
non temere ulla vi convinci posse putabant.



fortunisque ideo longe praestare putabant,
quod mortis timor haut quemquam vexaret eorum, 1180
et simul in somnis quia multa et mira videbant
efficere et nullum capere ipsos inde laborem.
praeterea caeli rationes ordine certo
et varia annorum cernebant tempora verti
nec poterant quibus id fieret cognoscere causis. 1185
ergo perfugium sibi habebant omnia divis
tradere et illorum nutu facere omnia flecti.
in caeloque deum sedes et templa locarunt,
per caelum volvi quia nox et luna videtur,
luna dies et nox et noctis signa severa 1190
noctivagaeque faces caeli flammaeque volantes,
nubila sol imbres nix venti fulmina grando
et rapidi fremitus et murmura magna minarum.
O genus infelix humanum, talia divis
cum tribuit facta atque iras adiunxit acerbas! 1195
quantos tum gemitus ipsi sibi, quantaque nobis
volnera, quas lacrimas peperere minoribu' nostris!
nec pietas ullast velatum saepe videri
vertier ad lapidem atque omnis accedere ad aras
nec procumbere humi prostratum et pandere palmas 1200
ante deum delubra nec aras sanguine multo
spargere quadrupedum nec votis nectere vota,
sed mage pacata posse omnia mente tueri.
nam cum suspicimus magni caelestia mundi
templa, super stellisque micantibus aethera fixum, 1205
et venit in mentem solis lunaeque viarum,
tunc aliis oppressa malis in pectora cura
illa quoque expergefactum caput erigere infit,
nequae forte deum nobis inmensa potestas
sit, vario motu quae candida sidera verset. 1210
temptat enim dubiam mentem rationis egestas,
ecquaenam fuerit mundi genitalis origo,
et simul ecquae sit finis, quoad moenia mundi

solliciti motus hunc possint ferre laborem,
an divinitus aeterna donata salute 1215
perpetuo possint aevi labentia tractu
inmensi validas aevi contemnere viris.
praeterea cui non animus formidine divum
contrahitur, cui non correpunt membra pavore,
fulminis horribili cum plaga torrida tellus 1220
contremit et magnum percurrunt murmura caelum?
non populi gentesque tremunt, regesque superbi
corripiunt divum percussi membra timore,
nequid ob admissum foede dictumve superbe
poenarum grave sit solvendi tempus adultum? 1225
summa etiam cum vis violenti per mare venti
induperatorem classis super aequora verrit
cum validis pariter legionibus atque elephantis,
non divom pacem votis adit ac prece quaesit
ventorum pavidus paces animasque secundas, 1230
nequiquam, quoniam violento turbine saepe
correptus nilo fertur minus ad vada leti?
usque adeo res humanas vis abdita quaedam
opterit et pulchros fascis saevasque secures
proculcare ac ludibrio sibi habere videtur. 1235
denique sub pedibus tellus cum tota vacillat
concussaeque cadunt urbes dubiaeque minantur,
quid mirum si se temnunt mortalia saecla
atque potestatis magnas mirasque relinqunt
in rebus viris divum, quae cuncta gubernent? 1240
Quod superest, aes atque aurum ferrumque repertumst
et simul argenti pondus plumbique potestas,
ignis ubi ingentis silvas ardore cremarat
montibus in magnis, seu caeli fulmine misso,
sive quod inter se bellum silvestre gerentes 1245
hostibus intulerant ignem formidinis ergo,
sive quod inducti terrae bonitate volebant
pandere agros pinguis et pascua reddere rura,

sive feras interficere et ditescere praeda.
nam fovea atque igni prius est venarier ortum 1250
quam saepire plagis saltum canibusque ciere.
quidquid id est, quacumque e causa flammeus ardor
horribili sonitu silvas exederat altis
ab radicibus et terram percoxerat igni,
manabat venis ferventibus in loca terrae 1255
concava conveniens argenti rivus et auri,
aeris item et plumbi. quae cum concreta videbant
posterius claro in terra splendere colore,
tollebant nitido capti levique lepore,
et simili formata videbant esse figura 1260
atque lacunarum fuerant vestigia cuique.
tum penetrabat eos posse haec liquefacta calore
quamlibet in formam et faciem decurrere rerum
et prorsum quamvis in acuta ac tenvia posse
mucronum duci fastigia procudendo, 1265
ut sibi tela darent, silvasque ut caedere possent
materiemque dolare et levia radere tigna
et terebrare etiam ac pertundere perque forare.
nec minus argento facere haec auroque parabant
quam validi primum violentis viribus aeris, 1270
nequiquam, quoniam cedebat victa potestas
nec poterat pariter durum sufferre laborem.
tum fuit in pretio magis aes aurumque iacebat
propter inutilitatem hebeti mucrone retusum.
nunc iacet aes, aurum in summum successit honorem. 1275
sic volvenda aetas commutat tempora rerum.
quod fuit in pretio, fit nullo denique honore;
porro aliut succedit et e contemptibus exit
inque dies magis adpetitur floretque repertum
laudibus et miro est mortalis inter honore. 1280

Nunc tibi quo pacto ferri natura reperta
sit facilest ipsi per te cognoscere, Memmi.
arma antiqua manus ungues dentesque fuerunt

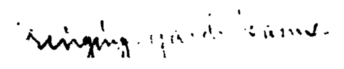
et lapides et item silvarum fragmina rami,
et flamma atque ignes, postquam sunt cognita primum.
posterius ferri vis est aerisque reperta. 1286
at prior aeris erat quam ferri cognitus usus,
quo facilis magis est natura et copia maior.
aere solum terrae tractabant, aereque belli
miscebant fluctus et vulnera vasta serebant 1290
et pecus atque agros adimebant; nam facile ollis
omnia cedebant armatis nuda et inerma.
inde minutatim processit ferreus ensis
versaque in obprobium species est falcis ahenae,
et ferro coepere solum proscindere terrae 1295
exaequataque sunt creperi certamina belli.
et prius est armatum in equi conscendere costas
et moderarier hunc frenis dextraque vigere
quam biiugo curru belli temptare pericla.
et biiugos prius est quam bis coniungere binos 1300
et quam falciferos armatum escendere currus.
inde boves lucas turrito corpore, taetras,
anguimanus, belli docuerunt volnera Poeni
sufferre et magnas Martis turbare catervas.
sic alid ex alio peperit discordia tristis, 1305
horribile humanis quod gentibus esset in armis,
inque dies belli terroribus addidit augmen.

Temptarunt etiam tauros in moenere belli
expertique sues saevos sunt mittere in hostis.
et validos partim prae se misere leones 1310
cum doctoribus armatis saevisque magistris
qui moderarier his possent vinclisque tenere,
nequiquam, quoniam permixta caede calentes
turbabant saevi nullo discrimine turmas,
terrificas capitum quatientes undique cristas, 1315
nec poterant equites fremitu perterrita equorum
pectora mulcere et frenis convertere in hostis.
inritata leae iaciebant corpora saltu

undique et adversum venientibus ora petebant
et nec opinantis a tergo deripiebant 1320
deplexaeque dabant in terram volnere victos,
morsibus adfixae validis atque unguibus uncis.
iactabantque suos tauri pedibusque terebant
et latera ac ventres hauribant supter equorum
cornibus et terram minitanti fronte ruebant. 1325
et validis socios caedebant dentibus apri
tela infracta suo tinguentes sanguine saevi,
in se fracta suo tinguentes sanguine tela
permixtasque dabant equitum peditumque ruinas.
nam transversa feros exibant dentis adactus 1330
iumenta aut pedibus ventos erecta petebant,
nequiquam, quoniam ab nervis succisa videres
concidere atque gravi terram consternere casu.
siquos ante domi domitos satis esse putabant,
effervescere cernebant in rebus agundis 1335
volneribus clamore fuga terrore tumultu,
nec poterant ullam partem redducere eorum;
diffugiebat enim varium genus omne ferarum;
ut nunc saepe boves lucae ferro male mactae
diffugiunt, fera fata suis cum multa dedere. 1340
[si fuit ut facerent sed vix adducor ut ante
non quierint animo praesentire atque videre
quam commune malum fieret foedumque futurum
et magis id possis factum contendere in omni
in variis mundis varia ratione creatis 1345
quam certo atque uno terrarum quolibet orbi]
sed facere id non tam vincendi spe voluerunt,
quam dare quod gemerent hostes, ipsique perire,
qui numero diffidebant armisque vacabant.

Nexilis ante fuit vestis quam textile tegmen. 1350
textile post ferrumst quia ferro tela paratur,
nec [illegible] alia po[illegible]nt tam levia gigni
[illegible] que sonantes.





et facere ante viros lanam natura coegit
quam muliebre genus; nam longe praestat in arte 1355
et sollertius est multo genus omne virile;
agricolae donec vitio vertere severi,
ut muliebribus id manibus concedere vellent
atque ipsi pariter durum sufferre laborem
atque opere in duro durarent membra manusque. 1360

At specimen sationis et insitionis origo
ipsa fuit rerum primum natura creatrix,
arboribus quoniam bacae glandesque caducae
tempestiva dabant pullorum examina supter;
unde etiam libitumst stirpis committere ramis 1365
et nova defodere in terram virgulta per agros.
inde aliam atque aliam culturam dulcis agelli
temptabant fructusque feros mansuescere terram
cernebant indulgendo blandeque colendo.
inque dies magis in montem succedere silvas 1370
cogebant infraque locum concedere cultis,
prata lacus rivos segetes vinetaque laeta
collibus et campis ut haberent, atque olearum
caerula distinguens inter plaga currere posset
per tumulos et convallis camposque profusa; 1375
ut nunc esse vides vario distincta lepore
omnia, quae pomis intersita dulcibus ornant
arbustisque tenent felicibus opsita circum.

At liquidas avium voces imitarier ore
ante fuit multo quam levia carmina cantu 1380
concelebrare homines possent aurisque iuvare.
et zephyri, cava per calamorum, sibila primum
agrestis docuere cavas inflare cicutas.
inde minutatim dulcis didicere querellas,
tibia quas fundit digitis pulsata canentum, 1385
avia per nemora ac silvas saltusque reperta,
per loca pastorum deserta atque otia dia.
haec animos ollis mulcebant atque iuvabant 1390

cum satiate cibi; nam tum haec sunt omnia cordi.
saepe itaque inter se prostrati in gramine molli
propter aquae rivom sub ramis arboris altae
non magnis opibus iucunde corpora habebant,
praesertim cum tempestas ridebat et anni 1395
tempora pingebant viridantis floribus herbas.
tum ioca, tum sermo, tum dulces esse cachinni
consuerant. agrestis enim tum musa vigebat;
tum caput atque umeros plexis redimire coronis
floribus et foliis lascivia laeta monebat, 1400
atque extra numerum procedere membra moventes
duriter et duro terram pede pellere matrem;
unde oriebantur risus dulcesque cachinni,
omnia quod nova tum magis haec et mira vigebant.
et vigilantibus hinc aderant solacia somni, 1405
ducere multimodis voces et flectere cantus
et supera calamos unco percurrere labro;
unde etiam vigiles nunc haec accepta tuentur
et numerum servare recens didicere, neque hilo
maiorem interea capiunt dulcedini' fructum 1410
quam silvestre genus capiebat terrigenarum.
nam quod adest praesto, nisi quid cognovimus ante
suavius, in primis placet et pollere videtur,
posteriorque fere melior res illa reperta
perdit et immutat sensus ad pristina quaeque. 1415
sic odium coepit glandis, sic illa relicta
strata cubilia sunt herbis et frondibus aucta.
pellis item cecidit vestis contempta ferinae;
quam reor invidia tali tunc esse repertam,
ut letum insidiis qui gessit primus obiret, 1420
et tamen inter eos distractam sanguine multo
disperiisse neque in fructum convertere quisse.
tunc igitur pelles, nunc aurum et purpura curis
exercent hominum vitam belloque fatigant;
quo magis in nobis, ut opinor, culpa resedit. 1425

frigus enim nudos sine pellibus excruciabat
terrigenas; at nos nil laedit veste carere
purpurea atque auro signisque ingentibus apta,
dum plebeia tamen sit quae defendere possit.
ergo hominum genus incassum frustraque laborat 1430
semper et in curis consumit inanibus aevom,
nimirum quia non cognovit quae sit habendi
finis et omnino quoad crescat vera voluptas.
idque minutatim vitam provexit in altum
et belli magnos commovit funditus aestus. 1435

At vigiles mundi magnum versatile templum
sol et luna suo lustrantes lumine circum
perdocuere homines annorum tempora verti
et certa ratione geri rem atque ordine certo.

Iam validis saepti degebant turribus aevom 1440
et divisa colebatur discretaque tellus,
iam mare velivolis florebat puppibus; urbes
auxilia ac socios iam pacto foedere habebant,
carminibus cum res gestas coepere poetae
tradere; nec multo priu' sunt elementa reperta. 1445
propterea quid sit prius actum respicere aetas
nostra nequit, nisi qua ratio vestigia monstrat.

Navigia atque agri culturas moenia leges
arma vias vestes et cetera de genere horum,
praemia, delicias quoque vitae funditus omnis, 1450
carmina picturas, et daedala signa polire,
usus et impigrae simul experientia mentis
paulatim docuit pedetemtim progredientis.
sic unumquicquid paulatim protrahit aetas
in medium ratioque in luminis erigit oras. 1455
namque alid ex alio clarescere et ordine debet
artibus, ad summum donec venere cacumen.

T. LUCRETI CARI

DE RERUM NATURA

LIBER SEXTUS.

Primae frugiparos fetus mortalibus aegris
dididerunt quondam praeclaro nomine Athenae
et recreaverunt vitam legesque rogarunt,
et primae dederunt solacia dulcia vitae,
cum genuere virum tali cum corde repertum, 5
omnia veridico qui quondam ex ore profudit;
cuius et extincti propter divina reperta
divolgata vetus iam ad caelum gloria fertur.
nam cum vidit hic ad victum quae flagitat usus
omnia iam ferme mortalibus esse parata 10
et, proquam posset, vitam consistere tutam,
divitiis homines et honore et laude potentis
affluere atque bona gnatorum excellere fama,
nec minus esse domi cuiquam tamen anxia corda,
atque animi ingratis vitam vexare sine ulla 15
pausa atque infestis cogei saevire querellis,
intellegit ibi vitium vas efficere ipsum
omniaque illius vitio corrumpier intus
quae conlata foris et commoda cumque venirent;
partim quod fluxum pertusumque esse videbat, 20
ut nulla posset ratione explerier umquam;
partim quod taetro quasi conspurcare sapore
omnia cernebat, quaecumque receperat, intus.

veridicis igitur purgavit pectora dictis
et finem statuit cuppedinis atque timoris 25
exposuitque bonum summum quo tendimus omnes
quid foret, atque viam monstravit, tramite parvo
qua possemus ad id recto contendere cursu,
quidve mali foret in rebus mortalibu' passim,
quod fieret naturali varieque volaret 30
seu casu seu vi, quod sic natura parasset,
et quibus e portis occurri cuique deceret,
et genus humanum frustra plerumque probavit
volvere curarum tristis in pectore fluctus.
nam veluti pueri trepidant atque omnia caecis 35
in tenebris metuunt, sic nos in luce timemus
interdum, nilo quae sunt metuenda magis quam
quae pueri in tenebris pavitant finguntque futura.
hunc igitur terrorem animi tenebrasque necessest
non radii solis nec lucida tela diei 40
discutiant, sed naturae species ratioque.
quo magis inceptum pergam pertexere dictis.
Et quoniam docui mundi mortalia templa
esse et nativo consistere corpore caelum,
et quaecumque in eo fiunt fierique necessest, 45
pleraque ressolui, quae restant percipe porro,
quandoquidem semel insignem conscendere currum

*

ventorum, ex ira ut placentur, ut omnia rursum
quae fuerint sint placato conversa furore.
cetera quae fieri in terris caeloque tuentur 50
mortales, pavidis cum pendent mentibu' saepe,
et faciunt animos humilis formidine divom
depressosque premunt ad terram propterea quod
ignorantia causarum conferre deorum
cogit ad imperium res et concedere regnum. 55
nam bene qui didicere deos securum agere aevom,
si tamen interea mirantur qua ratione

quaeque geri possint, praesertim rebus in illis 60
quae supera caput aetheriis cernuntur in oris,
rursus in antiquas referuntur religionis
et dominos acris adsciscunt, omnia posse
quos miseri credunt, ignari quid queat esse,
quid nequeat, finita potestas denique cuique 65
quanam sit ratione atque alte terminus haerens;
quo magis errantes caeca ratione feruntur.
quae nisi respuis ex animo longeque remittis
dis indigna putare alienaque pacis eorum,
delibata deum per te tibi numina sancta 70
saepe oberunt; non quo violari summa deum vis
possit, ut ex ira poenas petere inbibat acris,
sed quia tute tibi placida cum pace quietos
constitues magnos irarum volvere fluctus,
nec delubra deum placido cum pectore adibis, 75
nec de corpore quae sancto simulacra feruntur
in mentes hominum divinae nuntia formae,
suscipere haec animi tranquilla pace valebis.
inde videre licet qualis iam vita sequatur.
quam quidem ut a nobis ratio verissima longe 80
reiciat, quamquam sunt a me multa profecta,
multa tamen restant et sunt ornanda politis
versibus; est ratio caeli speciesque tenenda,
sunt tempestates et fulmina clara canenda,
quid faciant et qua de causa cumque ferantur: 85
ne trepides caeli divisis partibus amens,
unde volans ignis pervenerit aut in utram se
verterit hinc partim, quo pacto per loca saepta
insinuarit, et hinc dominatus ut extulerit se.
tu mihi supremae praescribta ad candida calcis 92
currenti spatium praemonstra, callida musa
Calliope, requies hominum divomque voluptas,
te duce ut insigni capiam cum laude coronam. 95
Principio tonitru quatiuntur caerula caeli

propterea quia concurrunt sublime volantes
aetheriae nubes contra pugnantibu' ventis.
nec fit enim sonitus caeli de parte serena,
verum ubicumque magis denso sunt agmine nubes, 100
tam magis hinc magno fremitus fit murmure saepe.
praeterea neque tam condenso corpore nubes
esse queunt quam sunt lapides ac tigna, neque autem
tam tenues quam sunt nebulae fumique volantes;
nam cadere aut bruto deberent pondere pressae 105
ut lapides, aut ut fumus constare nequirent
nec cohibere nives gelidas et grandinis imbris.
dant etiam sonitum patuli super aequora mundi,
carbasus ut quondam magnis intenta theatris
dat crepitum malos inter iactata trabesque; 110
interdum perscissa furit petulantibus auris
et fragilis sonitus chartarum commeditatur:
id quoque enim genus in tonitru cognoscere possis:
aut ubi suspensam vestem chartasve volantis
verberibus venti versant planguntque per auras. 115
fit quoque enim interdum ut non tam concurrere nubes
frontibus adversis possint quam de latere ire
diverso motu radentes corpora tractim,
aridus unde auris terget sonus ille diuque
ducitur, exierunt donec regionibus artis. 120

Hoc etiam pacto tonitru concussa videntur
omnia saepe gravi tremere et divolsa repente
maxima dissiluisse capacis moenia mundi,
cum subito validi venti conlecta procella
nubibus intorsit sese conclusaque ibidem 125
turbine versanti magis ac magis undique nubem
cogit uti fiat spisso cava corpore circum,
post ubi comminuit vis eius et impetus acer,
tum perterricrepo sonitu dat scissa fragorem.
nec mirum, cum plena animae vensicula parva 130
saepe ita dat torvum sonitum displosa repente.

Est etiam ratio, cum venti nubila perflant,
ut sonitus faciant. etenim ramosa videmus
nubila saepe modis multis atque aspera ferri;
scilicet ut, crebram silvam cum flamina cauri 135
perflant, dant sonitum frondes ramique fragorem.
fit quoque ut interdum validi vis incita venti
perscindat nubem perfringens impete recto.
nam quid possit ibi flatus manifesta docet res,
hic, ubi lenior est, in terra cum tamen alta 140
arbusta evolvens radicibus haurit ab imis.
sunt etiam fluctus per nubila, qui quasi murmur
dant in fragendo graviter; quod item fit in altis
fluminibus magnoque mari, cum frangitur aestus.
fit quoque, ubi e nubi in nubem vis incidit ardens 145
fulminis, haec multo si forte umore recepit
ignem, continuo ut magno clamore trucidet;
ut calidis candens ferrum e fornacibus olim
stridit, ubi in gelidum propere demersimus imbrem.
aridior porro si nubes accipit ignem, 150
uritur ingenti sonitu succensa repente;
lauricomos ut si per montis flamma vagetur
turbine ventorum comburens impete magno;
nec res ulla magis quam Phoebi Delphica laurus
terribili sonitu flamma crepitante crematur. 155
denique saepe geli multus fragor atque ruina
grandinis in magnis sonitum dat nubibus alte.
ventus enim cum confercit, franguntur, in artum,
concreti montes nimborum et grandine mixti.
Fulgit item, nubes ignis cum semina multa 160
excussere suo concursu; ceu lapidem si
percutiat lapis aut ferrum; nam tum quoque lumen
exilit et claras scintillas dissipat ignis.
sed tonitrum fit uti post auribus accipiamus,
fulgere quam cernant oculi, quia semper ad auris 165
tardius adveniunt quam visum quae moveant res.

id licet hinc etiam cognoscere: caedere si quem
ancipiti videas ferro procul arboris auctum,
ante fit ut cernas ictum quam plaga per auris
det sonitum; sic fulgorem quoque cernimus ante 170
quam tonitrum accipimus, pariter qui mittitur igni
e simili causa, concursu natus eodem.

Hoc etiam pacto volucri loca lumine tingunt
nubes et tremulo tempestas impete fulgit.
ventus ubi invasit nubem et versatus ibidem 175
fecit ut ante cavam docui spissescere nubem,
mobilitate sua fervescit; ut omnia motu
percalefacta vides ardescere, plumbea vero
glans etiam longo cursu volvenda liquescit.
ergo fervidus hic nubem cum perscidit atram, 180
dissipat ardoris quasi per vim expressa repente,
semina quae faciunt nictantia fulgura flammae;
inde sonus sequitur qui tardius adficit auris
quam quae perveniunt oculorum ad lumina nostra.
scilicet hoc densis fit nubibus et simul alte 185
extructis aliis alias super impete miro;
ne tibi sit frudi quod nos inferne videmus
quam sint lata magis quam sursum extructa quid extent.
contemplator enim, cum montibus adsimulata
nubila portabunt venti transversa per auras, 190
aut ubi per magnos montis cumulata videbis
insuper esse aliis alia atque urguere superne
in statione locata sepultis undique ventis:
tum poteris magnas moles cognoscere eorum
speluncasque velut saxis pendentibu' structas 195
cernere, quas venti cum tempestate coorta
conplerunt, magno indignantur murmure clausi
nubibus in caveisque ferarum more minantur;
nunc hinc nunc illinc fremitus per nubila mittunt
quaerentesque viam circum versantur et ignis 200
semina convolvunt e nubibus atque ita cogunt

multa rotantque cavis flammam fornacibus intus,
donec divolsa fulserunt nube corusci.
 Hac etiam fit uti de causa mobilis ille
devolet in terram liquidi color aureus ignis 205
semina quod nubes ipsas permulta necessust
ignis habere; etenim cum sunt umore sine ullo,
flammeus est plerumque colos et splendidus ollis.
quin etiam solis de lumine multa necessest
concipere, ut merito rubeant ignesque profundant. 210
hasce igitur cum ventus agens contrusit in unum
compressitque locum cogens, expressa profundunt
semina quae faciunt flammae fulgere colores.
fulgit item, cum rarescunt quoque nubila caeli.
nam cum ventus eas leviter diducit euntis 215
dissoluitque, cadant ingratis illa necessest
semina quae faciunt fulgorem. tum sine taetro
terrore et sonitu fulgit nulloque tumultu.
 Quod superest, quali natura praedita constent
fulmina, declarant ictus et inusta vaporis 220
signa notaeque gravis halantis sulpuris auras.
ignis enim sunt haec non venti signa neque imbris.
praeterea saepe accendunt quoque tecta domorum
et celeri flamma dominantur in aedibus ipsis.
hunc tibi subtilem cum primis ignibus ignem 225
constituit natura minutis mobilibusque
corporibus, cui nil omnino obsistere possit.
transit enim validum fulmen per saepta domorum,
clamor ut ac voces, transit per saxa, per aera,
et liquidum puncto facit aes in tempore et aurum, 230
curat item vasis integris vina repente
diffugiant, quia nimirum facile omnia circum
conlaxat rareque facit lateramina vasis
adveniens calor eius et insinuatus in ipsum
mobiliter soluens differt primordia vini. 235
quod solis vapor aetatem non posse videtur

efficere usque adeo pellens fervore corusco:
tanto mobilior vis et dominantior haec est.
Nunc ea quo pacto gignantur et impete tanto
fiant ut possint ictu discludere turris, 240
disturbare domos, avellere tigna trabesque,
et monimenta virum demoliri atque cremare,
exanimare homines, pecudes prosternere passim,
cetera de genere hoc qua vi facere omnia possint,
expediam, neque te in promissis plura morabor. 245
Fulmina gignier e crassis alteque putandumst
nubibus extructis; nam caelo nulla sereno
nec leviter densis mittuntur nubibus umquam.
nam dubio procul hoc fieri manifesta docet res;
quod tum per totum concrescunt aëra nubes, 250
undique uti tenebras omnis Acherunta reamur
liquisse et magnas caeli complesse cavernas;
usque adeo taetra nimborum nocte coorta
inpendent atrae formidinis ora superne
cum commoliri tempestas fulmina coeptat. 255
praeterea persaepe niger quoque per mare nimbus,
ut picis e caelo demissum flumen, in undas
sic cadit effertus tenebris procul et trahit atram
fulminibus gravidam tempestatem atque procellis,
ignibus ac ventis cum primis ipse repletus, 260
in terra quoque ut horrescant ac tecta requirant.
sic igitur supera nostrum caput esse putandumst
tempestatem altam. neque enim caligine tanta
obruerent terras, nisi inaedificata superne
multa forent multis exempto nubila sole; 265
nec tanto possent venientes opprimere imbri,
flumina abundare ut facerent camposque natare,
si non extructis foret alte nubibus aether.
hic igitur ventis atque ignibus omnia plena
sunt; ideo passim fremitus et fulgura fiunt. 270
quippe etenim supra docui permulta vaporis

semina habere cavas nubes et multa necessest
concipere ex solis radiis ardoreque eorum.
hoc ubi ventus eas idem qui cogit in unum
forte locum quemvis, expressit multa vaporis 275
semina seque simul cum eo commiscuit igni,
insinuatus ibi vortex versatur in arto
et calidis acuit fulmen fornacibus intus.
nam duplici ratione accenditur, ipse sua cum
mobilitate calescit et e contagibus ignis. 280
inde ubi percaluit venti vis et gravis ignis
impetus incessit, maturum tum quasi fulmen
perscindit subito nubem, ferturque coruscis
omnia luminibus lustrans loca percitus ardor.
quem gravis insequitur sonitus, displosa repente 285
opprimere ut caeli videatur templa superne.
inde tremor terras graviter pertemptat et altum
murmura percurrunt caelum ; nam tota fere tum
tempestas concussa tremit fremitusque moventur.
quo de concussu sequitur gravis imber et uber, 290
omnis uti videatur in imbrem vertier aether
atque ita praecipitans ad diluviem revocari :
tantus discidio nubis ventique procella
mittitur, ardenti sonitus cum provolat ictu.
est etiam cum vis extrinsecus incita venti 295
incidit in calidam maturo fulmine nubem ;
quam cum perscidit, extemplo cadit igneus ille
vertex quem patrio vocitamus nomine fulmen.
hoc fit idem in partis alias, quocumque tulit vis.
fit quoque ut interdum venti vis missa sine igni 300
igniscat tamen in spatio longoque meatu,
dum venit, amittens in cursu corpora quaedam
grandia quae nequeunt pariter penetrare per auras ;
atque alia ex ipso conradens aëre portat
parvola quae faciunt ignem commixta volando ; 305
non alia longe ratione ac plumbea saepe

fervida fit glans in cursu, cum multa rigoris
corpora dimittens ignem concepit in auris.
fit quoque ut ipsius plagae vis excitet ignem,
frigida cum venti pepulit vis missa sine igni, 310
nimirum quia, cum vementi perculit ictu,
confluere ex ipso possunt elementa vaporis
et simul ex illa quae tum res excipit ictum;
ut lapidem ferro cum caedimus, evolat ignis,
nec, quod frigida vis ferrist, hoc setius illi 315
semina concurrunt calidi fulgoris ad ictum.
sic igitur quoque res accendi fulmine debet,
opportuna fuit si forte et idonea flammis.
nec temere omnino plane vis frigida venti
esse potest, ea quae tanta vi missa supernest, 320
quin, prius in cursu si non accenditur igni,
at tepefacta tamen veniat commixta calore.

Mobilitas autem fit fulminis et gravis ictus,
et celeri ferme percurrunt fulmina lapsu,
nubibus ipsa quod omnino prius incita se vis 325
colligit et magnum conamen sumit eundi,
inde ubi non potuit nubes capere inpetis auctum,
exprimitur vis atque ideo volat impete miro,
ut validis quae de tormentis missa feruntur.
adde quod e parvis et levibus est elementis, 330
nec facilest tali naturae opsistere quicquam;
inter enim fugit ac penetrat per rara viarum,
non igitur multis offensibus in remorando
haesitat, hanc ob rem celeri volat impete labens.
deinde, quod omnino natura pondera deorsum 335
omnia nituntur, cum plagast addita vero,
mobilitas duplicatur et impetus ille gravescit,
ut vementius et citius quaecumque morantur
obvia discutiat plagis itinerque sequatur.
denique quod longo venit impete, sumere debet 340
mobilitatem etiam atque etiam, quae crescit eundo

et validas auget viris et roborat ictum.
nam facit ut quae sint illius semina cumque
e regione locum quasi in unum cuncta ferantur,
omnia coniciens in eum volventia cursum. 345
forsitan ex ipso veniens trahat aëre quaedam
corpora quae plagis incendunt mobilitatem.
incolumisque venit per res atque integra transit
multa, foraminibus liquidus quia transvolat ignis.
multaque perfringit, cum corpora fulminis ipsa 350
corporibus rerum inciderunt, qua texta tenentur.
dissoluit porro facile aes aurumque repente
confervefacit, e parvis quia facta minute
corporibus vis est et levibus ex elementis,
quae facile insinuantur et insinuata repente 355
dissoluont nodos omnis et vincla relaxant.
autumnoque magis stellis fulgentibus apta
concutitur caeli domus undique totaque tellus,
et cum tempora se veris florentia pandunt.
frigore enim desunt ignes ventique calore 360
deficiunt neque sunt tam denso corpore nubes.
interutrasque igitur cum caeli tempora constant,
tum variae causae concurrunt fulminis omnes.
nam fretus ipse anni permiscet frigus et aestum,
quorum utrumque opus est fabricanda ad fulmina nubi, 365
ut discordia sit rerum magnoque tumultu
ignibus et ventis furibundus fluctuet aër.
prima caloris enim pars et postrema rigoris,
tempus id est vernum; quare pugnare necessest
dissimilis res inter se turbareque mixtas. 370
et calor extremus primo cum frigore mixtus
volvitur, autumni quod fertur nomine tempus,
hic quoque confligunt hiemes aestatibus acres.
propterea freta sunt haec anni nominitanda,
nec mirumst, in eo si tempore plurima fiunt 375
fulmina tempestasque cietur turbida caelo,

ancipiti quoniam bello turbatur utrimque,
hinc flammis illinc ventis umoreque mixto.
  Hoc est igniferi naturam fulminis ipsam
perspicere et qua vi faciat rem quamque videre, 380
non Tyrrhena retro volventem carmina frustra
indicia occultae divum perquirere mentis,
unde volans ignis pervenerit aut in utram se
verterit hinc partim, quo pacto per loca saepta
insinuarit, et hinc dominatus ut extulerit se, 385
quidve nocere queat de caelo fulminis ictus.
quod si Iuppiter atque alii fulgentia divi
terrifico quatiunt sonitu caelestia templa
et iaciunt ignem quo quoiquest cumque voluptas,
cur quibus incautum scelus aversabile cumquest 390
non faciunt icti flammas ut fulguris halent
pectore perfixo, documen mortalibus acre,
et potius nulla sibi turpi conscius in re
volvitur in flammis innoxius inque peditur
turbine caelesti subito correptus et igni? 395
cur etiam loca sola petunt frustraque laborant?
an tum bracchia consuescunt firmantque lacertos?
in terraque patris cur telum perpetiuntur
optundi? cur ipse sinit neque parcit in hostis?
denique cur numquam caelo iacit undique puro 400
Iuppiter in terras fulmen sonitusque profundit?
an simul ac nubes successere, ipse in eas tum
descendit, prope ut hinc teli determinet ictus?
in mare qua porro mittit ratione? quid undas
arguit et liquidam molem camposque natantis? 405
praeterea si vult caveamus fulminis ictum,
cur dubitat facere ut possimus cernere missum?
si nec opinantis autem volt opprimere igni,
cur tonat ex illa parte, ut vitare queamus,
cur tenebras ante et fremitus et murmura concit? 410
et simul in multas partis qui credere possis

mittere? an hoc ausis numquam contendere factum,
ut fierent ictus uno sub tempore plures?
at saepest numero factum fierique necessest,
ut pluere in multis regionibus et cadere imbris, 415
fulmina sic uno fieri sub tempore multa.
postremo cur sancta deum delubra suasque
discutit infesto praeclaras fulmine sedes
et bene facta deum frangit simulacra suisque
demit imaginibus violento volnere honorem? 420
altaque cur plerumque petit loca plurimaque eius
montibus in summis vestigia cernimus ignis?

Quod superest, facilest ex his cognoscere rebus,
presteras Grai quos ab re nominitarunt,
in mare qua missi veniant ratione superne. 425
nam fit ut interdum tamquam demissa columna
in mare de caelo descendat, quam freta circum
fervescunt graviter spirantibus incita flabris,
et quaecumque in eo tum sint deprensa tumultu
navigia in summum veniant vexata periclum. 430
hoc fit ubi interdum non quit vis incita venti
rumpere quam coepit nubem, sed deprimit, ut sit
in mare de caelo tamquam demissa columna,
paulatim, quasi quid pugno bracchique superne
coniectu trudatur et extendatur in undas; 435
quam cum discidit, hinc prorumpitur in mare venti
vis et fervorem mirum concinnat in undis;
versabundus enim turbo descendit et illam
deducit pariter lento cum corpore nubem;
quam simul ac gravidam detrusit ad aequora ponti, 440
ille in aquam subito totum se inmittit et omne
excitat ingenti sonitu mare fervere cogens.
fit quoque ut involvat venti se nubibus ipse
vertex conradens ex aëre semina nubis
et quasi demissum caelo prestera imitetur. 445
hic ubi se in terras demisit dissoluitque,

turbinis inmanem vim provomit atque procellae.
sed quia fit raro omnino montisque necessest
officere in terris, apparet crebrius idem
prospectu maris in magno caeloque patenti. 450

Nubila concrescunt, ubi corpora multa volando
hoc supero in caeli spatio coiere repente
asperiora, moris quae possint indupedita
exiguis tamen inter se comprensa teneri.
haec faciunt primum parvas consistere nubes; 455
inde haec comprendunt inter se conque gregantur
et coniungendo crescunt ventisque feruntur
usque adeo donec tempestas saeva coortast.
fit quoque uti montis vicina cacumina caelo
quam sint quoque magis, tanto magis edita fument 460
adsidue furvae nubis caligine crassa
propterea quia, cum consistunt nubila primum,
ante videre oculi quam possint, tenvia, venti
portantes cogunt ad summa cacumina montis.
hic demum fit uti turba maiore coorta 465
et condensa queant apparere et simul ipso
vertice de montis videantur surgere in aethram.
nam loca declarat sursum ventosa patere
res ipsa et sensus, montis cum ascendimus altos.
praeterea permulta mari quoque tollere toto 470
corpora naturam declarant litore vestes
suspensae, cum concipiunt umoris adhaesum.
quo magis ad nubis augendas multa videntur
posse quoque e salso consurgere momine ponti;
nam ratio consanguineast umoribus ollis. 475
praeterea fluviis ex omnibus et simul ipsa
surgere de terra nebulas aestumque videmus,
quae velut halitus hinc ita sursum expressa feruntur
suffunduntque sua caelum caligine et altas
sufficiunt nubis paulatim conveniundo; 480
urget enim quoque signiferi super aetheris aestus

et quasi densendo subtexit caerula nimbis.
fit quoque ut huc veniant in caelum extrinsecus illa
corpora quae faciunt nubis nimbosque volantis;
innumerabilem enim numerum summamque profundi 485
esse infinitam docui, quantaque volarent
corpora mobilitate ostendi quamque repente
inmemorabile per spatium transire solerent.
haut igitur mirumst si parvo tempore saepe
montibu' tam magnis tempestas atque tenebrae 490
coperiunt maria ac terras inpensa superne,
undique quandoquidem per caulas aetheris omnis
et quasi per magni circum spiracula mundi
exitus introitusque elementis redditus extat.

Nunc age, quo pacto pluvius concrescat in altis 495
nubibus umor et in terras demissus ut imber
decidat, expediam. primus iam semina aquai
multa simul vincam consurgere nubibus ipsis
omnibus ex rebus pariterque ita crescere utrumque,
et nubis et aquam quaecumque in nubibus extat, 500
ut pariter nobis corpus cum sanguine crescit,
sudor item atque umor quicumque est denique membris.
concipiunt etiam multum quoque saepe marinum
umorem, veluti pendentia vellera lanae,
cum supera magnum mare venti nubila portant. 505
consimili ratione ex omnibus amnibus umor
tollitur in nubis. quo cum bene semina aquarum
multa modis multis convenere undique adaucta,
confertae nubes umorem mittere certant
dupliciter; nam vis venti contrudit et ipsa 510
copia nimborum turba maiore coacta
urget, de supero premit ac facit effluere imbris.
praeterea cum rarescunt quoque nubila ventis
aut dissolvuntur, solis super icta calore,
mittunt umorem pluvium stillantque, quasi igni 515
cera super calido tabescens multa liquescat.



sed vemens imber fit, ubi vementer utraque
nubila vi cumulata premuntur et impete venti.
atque tenere diu pluviae longumque morari
consuerunt, ubi multa cientur semina aquarum 520
atque aliis aliae nubes nimbique rigantes
insuper atque omni vulgo de parte feruntur,
terraque cum fumans umorem tota redhalat.
hic ubi sol radiis tempestatem inter opacam
adversa fulsit nimborum aspargine contra, 525
tum color in nigris existit nubibus arqui.

Cetera quae sorsum crescunt sorsumque creantur,
et quae concrescunt in nubibus, omnia, prorsum
omnia, nix venti grando gelidaeque pruinae
et vis magna geli, magnum duramen aquarum, 530
et mora quae fluvios passim refrenat euntis,
perfacilest tamen haec reperire animoque videre
omnia quo pacto fiant quareve creentur,
cum bene cognoris elementis reddita quae sint.

Nunc age quae ratio terrai motibus extet 535
percipe. et in primis terram fac ut esse rearis
supter item ut supera ventosis undique plenam
speluncis multosque lacus multasque lucunas
in gremio gerere et rupes deruptaque saxa;
multaque sub tergo terrai flumina tecta 540
volvere vi fluctus summersaque saxa putandumst;
undique enim similem esse sui res postulat ipsa.
his igitur rebus subiunctis suppositisque
terra superne tremit magnis concussa ruinis,
subter ubi ingentis speluncas subruit aetas; 545
quippe cadunt toti montes magnoque repente
concussu late disserpunt inde tremores.
et merito, quoniam plaustri concussa tremescunt
tecta viam propter non magno pondere tota,
nec minus exultant, ut scrupus cumque viai 550
ferratos utrimque rotarum succutit orbes.

fit quoque, ubi in magnas aqüae vastasque lucunas
gleba vestustate e terra provolvitur ingens,
ut iactetur aquae fluctu quoque terra vacillans;
ut vas interdum non quit constare, nisi umor 555
destitit in dubio fluctu iactarier intus.

Praeterea ventus cum per loca subcava terrae
collectus parte ex una procumbit et urget
obnixus magnis speluncas viribus altas,
incumbit tellus quo venti prona premit vis. 560
tum supera terram quae sunt extructa domorum
ad caelumque magis quanto sunt edita quaeque,
inclinata tument in eandem prodita partem
protractaeque trabes inpendent ire paratae.
et metuunt magni naturam credere mundi 565
exitiale aliquod tempus clademque manere,
cum videant tantam terrarum incumbere molem!
quod nisi respirent venti, vis nulla refrenet
res neque ab exitio possit reprehendere euntis.
nunc quia respirant alternis inque gravescunt 570
et quasi collecti redeunt ceduntque repulsi,
saepius hanc ob rem minitatur terra ruinas
quam facit; inclinatur enim retroque recellit
et recipit prolapsa suas in pondera sedes.
hac igitur ratione vacillant omnia tecta, 575
summa magis mediis, media imis, ima perhilum.

Est haec eiusdem quoque magni causa tremoris,
ventus ubi atque animae subito vis maxima quaedam
aut extrinsecus aut ipsa tellure coorta
in loca se cava terrai coniecit ibique 580
speluncas inter magnas fremit ante tumultu
versabundaque portatur, post incita cum vis
exagitata foras erumpitur et simul altam
diffindens terram magnum concinnat hiatum.
in Syria Sidone quod accidit et fuit Aegi 585
in Peloponneso, quas exitus hic animai

disturbat urbes et terrae motus obortus.
multaque praeterea ceciderunt moenia magnis
motibus in terris et multae per mare pessum
subsedere suis pariter cum civibus urbes. 590
quod nisi prorumpit, tamen impetus ipse animai
et fera vis venti per crebra foramina terrae
dispertitur ut horror et incutit inde tremorem;
frigus uti nostros penitus cum venit in artus,
concutit invitos cogens tremere atque movere. 595
ancipiti trepidant igitur terrore per urbis,
tecta superne timent, metuunt inferne cavernas
terrai ne dissoluat natura repente,
neu distracta suum late dispandat hiatum
adque suis confusa velit complere ruinis. 600
proinde licet quamvis caelum terramque reantur
incorrupta fore aeternae mandata saluti;
et tamen interdum praesens vis ipsa pericli
subdit et hunc stimulum quadam de parte timoris,
ne pedibus raptim tellus subtracta feratur 605
in barathrum rerumque sequatur prodita summa
funditus et fiat mundi confusa ruina.

[Principio mare mirantur non reddere maius
naturam, quo sit tantus decursus aquarum,
omnia quo veniant ex omni flumina parte. 610
adde vagos imbris tempestatesque volantes,
omnia quae maria ac terras sparguntque rigantque;
adde suos fontis; tamen ad maris omnia summam
guttai vix instar erunt unius adaugmen;
quo minus est mirum mare non augescere magnum. 615
praeterea magnam sol partem detrahit aestu.
quippe videmus enim vestis umore madentis
exsiccare suis radiis ardentibu' solem:
at pelage multa et late substrata videmus.
proinde licet quamvis ex uno quoque loco sol 620
umoris parvam delibet ab aequore partem:

largiter in tanto spatio tamen auferet undis.
tum porro venti quoque magnam tollere partem
umoris possunt verrentes aequora, ventis
una nocte vias quoniam persaepe videmus 625
siccari mollisque luti concrescere crustas.
praeterea docui multum quoque tollere nubes
umorem magno conceptum ex aequore ponti
et passim toto terrarum spargere in orbi,
cum pluit in terris et venti nubila portant. 630
postremo quoniam raro cum corpore tellus
est, et coniunctast, oras maris undique cingens,
debet, ut in mare de terris venit umor aquai,
in terras itidem manare ex aequore salso;
percolatur enim virus retroque remanat 635
materies umoris et ad caput amnibus omnis
confluit, inde super terras redit agmine dulci
qua via secta semel liquido pede detulit undas.]

Nunc ratio quae sit, per fauces montis ut Aetnae
expirent ignes interdum turbine tanto, 640
expediam. neque enim mediocri clade coorta
flammea tempestas Siculum dominata per agros
finitimis ad se convertit gentibus ora,
fumida cum caeli scintillare omnia templa
cernentes pavida complebant pectora cura 645
quid moliretur rerum natura novarum.

Hisce tibi in rebus latest alteque videndum
et longe cunctas in partis dispiciendum,
ut reminiscaris summam rerum esse profundam
et videas caelum summai totius unum 650
quam sit parvula pars et quam multesima constet,
nec tota pars, homo terrai quota totius unus.
quod bene propositum si plane contueare
ac videas plane, mirari multa relinquas.
numquis enim nostrum miratur siquis in artus 655
accepit calido febrim fervore coortam

aut alium quemvis morbi per membra dolorem?
opturgescit enim subito pes, arripit acer
saepe dolor dentes, oculos invadit in ipsos,
existit sacer ignis et urit corpore serpens 660
quamcumque arripuit partim, repitque per artus,
nimirum quia sunt multarum semina rerum,
et satis haec tellus nobis caelumque mali fert,
unde queat vis immensi procrescere morbi.
sic igitur toti caelo terraeque putandumst 665
ex infinito satis omnia suppeditare,
unde repente queat tellus concussa moveri
perque mare ac terras rapidus percurrere turbo,
ignis abundare Aetnaeus, flammescere caelum;
id quoque enim fit et ardescunt caelestia templa, 670
et tempestates pluviae graviore coortu
sunt, ubi forte ita se tetulerunt semina aquarum.
'at nimis est ingens incendi turbidus ardor.'
scilicet et fluvius quivis est maximus ei
qui non ante aliquem maiorem vidit, et ingens 675
arbor homoque videtur, et omnia de genere omni
maxima quae vidit quisque, haec ingentia fingit,
cum tamen omnia cum caelo terraque marique
nil sint ad summam summai totius omnem.

Nunc tamen illa modis quibus inritata repente 680
flamma foras vastis Aetnae fornacibus efflet,
expediam. primum totius subcava montis
est natura, fere silicum suffulta cavernis.
omnibus est porro in speluncis ventus et aër;
ventus enim fit, ubi est agitando percitus aër. 685
hic ubi percaluit calefecitque omnia circum
saxa furens, qua contingit, terramque, et ab ollis
excussit calidum flammis velocibus ignem,
tollit se ac rectis ita faucibus eicit alte.
fert itaque ardorem longe longeque favillam 690
differt et crassa volvit caligine fumum



extruditque simul mirando pondere saxa;
ne dubites quin haec animai turbida sit vis.
praeterea magna ex parti mare montis ad eius
radices frangit fluctus aestumque resorbet. 695
ex hoc usque mari speluncae montis ad altas
perveniunt subter fauces. hac ire fatendumst

. . . .

et penetrare mari penitus res cogit aperto
atque efflare foras ideoque extollere flammam
saxaque subiectare et arenae tollere nimbos. 700
in summo sunt vertice enim crateres, ut ipsi
nominitant; nos quod fauces perhibemus et ora.

Sunt aliquot quoque res quarum unam dicere causam
non satis est, verum pluris, unde una tamen sit;
corpus ut exanimum siquod procul ipse iacere 705
conspicias hominis, fit ut omnis dicere causas
conveniat leti, dicatur ut illius una.
nam neque cum ferro nec frigore vincere possis
interiisse neque a morbo neque forte veneno,
verum aliquid genere esse ex hoc quod contigit ei 710
scimus. item in multis hoc rebus dicere habemus.

Nilus in aestatem crescit campisque redundat,
unicus in terris Aegypti totius amnis.
is rigat Aegyptum medium per saepe calorem,
aut quia sunt aestate aquilones ostia contra, 715
anni tempore eo qui etesiae esse feruntur,
et contra fluvium flantes remorantur et undas
cogentes sursus replent coguntque manere.
nam dubio procul haec adverso flabra feruntur
flumine, quae gelidis ab stellis axis aguntur. 720
ille ex aestifera parti venit amnis ab austro,
inter nigra virum percocto saecla colore
exoriens penitus media ab regione diei.
est quoque uti possit magnus congestus harenae
fluctibus adversis oppilare ostia contra, 725

cum mare permotum ventis ruit intus harenam ;
quo fit uti pacto liber minus exitus amni
et proclivis item fiat minus impetus undis.
fit quoque uti pluviae forsan magis ad caput ei
tempore eo fiant, quod etesia flabra aquilonum 730
nubila coniciunt in eas tunc omnia partis.
scilicet ad mediam regionem eiecta diei
cum convenerunt, ibi ad altos denique montis
contrusae nubes coguntur vique premuntur.
forsitan Aethiopum penitus de montibus altis 735
crescat, ubi in campos albas descendere ningues
tabificis subigit radiis sol omnia lustrans.

Nunc age, Averna tibi quae sint loca cumque lacusque
expediam, quali natura praedita constent.
principio, quod Averna vocantur nomine, id ab re 740
inpositumst, quia sunt avibus contraria cunctis,
e regione ea quod loca cum venere volantes,
remigi oblitae pennarum vela remittunt
praecipitesque cadunt molli cervice profusae
in terram, si forte ita fert natura locorum, 745
aut in aquam, si forte lacus substratus Avernist.
is locus est Cumas aput, acri sulpure montes
oppleti calidis ubi fumant fontibus aucti.
est et Athenaeis in moenibus, arcis in ipso
vertice, Palladis ad templum Tritonidis almae, 750
quo numquam pennis appellunt corpora raucae
cornices, non cum fumant altaria donis ;
usque adeo fugitant non iras Palladis acris
pervigili causa, Graium ut cecinere poetae,
sed natura loci ope sufficit ipsa suapte. 755
in Syria quoque fertur item locus esse videri,
quadripedes quoque quo simul ac vestigia primum
intulerint, graviter vis cogat concidere ipsa,
manibus ut si sint divis mactata repente.
omnia quae naturali ratione geruntur, 760



et quibus effiant causis apparet origo;
ianua ne forte his Orci regionibus esse
credatur, post hinc animas Acheruntis in oras
ducere forte deos manis inferne reamur,
naribus alipedes ut cervi saepe putantur 765
ducere de latebris serpentia saecla ferarum.
quod procul a vera quam sit ratione repulsum
percipe; nam de re nunc ipsa dicere conor.

Principio hoc dico, quod dixi saepe quoque ante,
in terra cuiusque modi rerum esse figuras; 770
multa, cibo quae sunt, vitalia, multaque, morbos
incutere et mortem quae possint adcelerare.
et magis esse aliis alias animantibus aptas
res ad vitai rationem ostendimus ante
propter dissimilem naturam dissimilisque 775
texturas inter sese primasque figuras.
multa meant inimica per auris, multa per ipsas
insinuant naris infesta atque aspera iactu,
nec sunt multa parum tactu vitanda neque autem
aspectu fugienda saporeque tristia quae sint. 780

Deinde videre licet quam multae sint homini res
acriter infesto sensu spurcaeque gravesque;
arboribus primum certis gravis umbra tributa
usque adeo, capitis faciant ut saepe dolores,
siquis eas supter iacuit prostratus in herbis. 785
est etiam magnis Heliconis montibus arbos
floris odore hominem taetro consueta necare.
scilicet haec ideo terris ex omnia surgunt,
multa modis multis multarum semina rerum
quod permixta gerit tellus discretaque tradit. 790
nocturnumque recens extinctum lumen ubi acri
nidore offendit nares, consopit ibidem,
concidere et spumas qui morbo mittere suevit.
castoreoque gravi mulier sopita recumbit
et manibus nitidum teneris opus effluit ei, 795

tempore eo si odoratast quo menstrua solvit.
multaque praeterea languentia membra per artus
solvunt atque animam labefactant sedibus intus.
denique si calidis etiam cunctare lavabris
plenior et laveris, solio ferventis aquai 800
quam facile in medio fit uti des saepe ruinas!
carbonumque gravis vis atque odor insinuatur
quam facile in cerebrum, nisi aquam praecepimus ante!
at cum membra domus percepit fervidu', nervis
tum fit odor viri plagae mactabilis instar. 805
nonne vides etiam terra quoque sulpur in ipsa
gignier et taetro concrescere odore bitumen;
denique ubi argenti venas aurique secuntur,
terrai penitus scrutantes abdita ferro,
qualis expiret Scaptensula subter odores? 810
quidve mali fit ut exhalent aurata metalla!
quas hominum reddunt facies qualisque colores!
nonne vides audisve perire in tempore parvo
quam soleant et quam vitai copia desit,
quos opere in tali cohibet vis magna necessis? 815
hos igitur tellus omnis exaestuat aestus
expiratque foras in apertum promptaque caeli.
Sic et Averna loca alitibus summittere debent
mortiferam vim, de terra quae surgit in auras,
ut spatium caeli quadam de parte venenet; 820
quo simul ac primum pennis delata sit ales,
impediatur ibi caeco correpta veneno,
ut cadat e regione loci, qua derigit aestus.
quo cum conruit, hic eadem vis illius aestus
reliquias vitae membris ex omnibus aufert. 825
quippe etenim primo quasi quendam conciet aestum;
posterius fit uti, cum iam cecidere veneni
in fontis ipsos, ibi sit quoque vita vomenda
propterea quod magna mali fit copia circum.
Fit quoque ut interdum vis haec atque aestus Averni 830

aëra, qui inter avis cumquest terramque locatus,
discutiat, prope uti locus hic linquatur inanis.
cuius ubi e regione loci venere volantes,
claudicat extemplo pinnarum nisus inanis
et conamen utrimque alarum proditur omne. 835
hic ubi nixari nequeunt insistereque alis,
scilicet in terram delabi pondere cogit
natura, et vacuum prope iam per inane iacentes
dispergunt animas per caulas corporis omnis.

*

frigidior porro in puteis aestate fit umor, 840
rarescit quia terra calore et semina siquae
forte vaporis habet proprii, dimittit in auras.
quo magis est igitur tellus effeta calore,
fit quoque frigidior qui in terrast abditus umor.
frigore cum premitur porro omnis terra coitque 845
et quasi concrescit, fit scilicet ut coeundo
exprimat in puteos si quem gerit ipsa calorem.

Esse apud Hammonis fanum fons luce diurna
frigidus et calidus nocturno tempore fertur.
hunc homines fontem nimis admirantur et acri 850
sole putant supter terras fervescere raptim,
nox ubi terribili terras caligine texit.
quod nimis a verast longe ratione remotum.
quippe ubi sol nudum contractans corpus aquai
non quierit calidum supera de reddere parte, 855
cum superum lumen tanto fervore fruatur,
qui queat hic supter tam crasso corpore terram
percoquere umorem et calido satiare vapore?
praesertim cum vix possit per saepta domorum
insinuare suum radiis ardentibus aestum. 860
quae ratiost igitur? nimirum terra magis quod
rara tepet circum fontem quam cetera tellus
multaque sunt ignis prope semina corpus aquai.
hoc ubi roriferis terram nox obruit umbris,

extemplo penitus frigescit terra coitque. 865
hac ratione fit ut, tamquam compressa manu sit,
exprimat in fontem quae semina cumque habet ignis,
quae calidum faciunt aqüae tactum atque saporem.
inde ubi sol radiis terram dimovit obortus
et rarefecit calido gliscente vapore, 870
rursus in antiquas redeunt primordia sedes
ignis et in terram cedit calor omnis aquai.
frigidus hanc ob rem fit fons in luce diurna.
praeterea solis radiis iactatur aquai
umor et in lucem tremulo rarescit ab aestu; 875
propterea fit uti quae semina cumque habet ignis
dimittat; quasi saepe gelum, quod continet in se,
mittit et exolvit glaciem nodosque relaxat.

Frigidus est etiam fons, supra quem sita saepe
stuppa iacit flammam concepto protinus igni, 880
taedaque consimili ratione accensa per undas
conlucet, quocumque natans impellitur auris.
nimirum quia sunt in aqua permulta vaporis
semina de terraque necessest funditus ipsa
ignis corpora per totum consurgere fontem 885
et simul exspirare foras exireque in auras,
non ita multa tamen, calidus queat ut fieri fons,
propterea dispersa foras erumpere cogit
vis per aquam subito sursumque ea conciliari.
quod genus endo marist Aradi fons, dulcis aquai 890
qui scatit et salsas circum se dimovet undas;
et multis aliis praebet regionibus aequor
utilitatem opportunam sitientibu' nautis,
quod dulcis inter salsas intervomit undas.
sic igitur per eum possunt erumpere fontem 895
et scatere illa foras, in stuppam semina quae cum
conveniunt aut in taedai corpore adhaerent,
ardescunt facile extemplo, quia multa quoque in se
semina habent ignis stuppae taedaeque latentis.



nonne vides etiam, nocturna ad lumina linum 900
nuper ubi extinctum admoveas, accendier ante
quam tetigit flammam, taedamque pari ratione?
multaque praeterea prius ipso tacta vapore
eminus ardescunt quam comminus imbuat ignis.
hoc igitur fieri quoque in illo fonte putandumst. 905

Quod superest, agere incipiam quo foedere fiat
naturae, lapis hic ut ferrum ducere possit,
quem Magneta vocant patrio de nomine Grai,
Magnetum quia fit patriis in finibus ortus.
hunc homines lapidem mirantur; quippe catenam 910
saepe ex anellis reddit pendentibus ex se.
quinque etenim licet interdum pluresque videre
ordine demissos levibus iactarier auris,
unus ubi ex uno dependet supter adhaerens
ex alioque alius lapidis vim vinclaque noscit: 915
usque adeo permananter vis pervolat eius.

Hoc genus in rebus firmandumst multa prius quam
ipsius rei rationem reddere possis,
et nimium longis ambagibus est adeundum;
quo magis attentas auris animumque reposco. 920

Principio omnibus ab rebus, quascumque videmus,
perpetuo fluere ac mitti spargique necessest
corpora quae feriant oculos visumque lacessant.
perpetuoque fluunt certis ab rebus odores;
frigus ut a fluviis, calor ab sole, aestus ab undis 925
aequoris exesor moerorum litora propter.
nec varii cessant sonitus manare per auras.
denique in os salsi venit umor saepe saporis,
cum mare versamur propter, dilutaque contra
cum tuimur misceri absinthia, tangit amaror. 930
usque adeo omnibus ab rebus res quaeque fluenter
fertur et in cunctas dimittitur undique partis
nec mora nec requies interdatur ulla fluendi,
perpetuo quoniam sentimus, et omnia semper

cernere odorari licet et sentire sonare. 935
Nunc omnis repetam quam raro corpore sint res
commemorare; quod in primo quoque carmine claret.
quippe etenim, quamquam multas hoc pertinet ad res
noscere, cum primis hanc ad rem protinus ipsam,
qua de disserere adgredior, firmare necessest 940
nil esse in promptu nisi mixtum corpus inani.
principio fit ut in speluncis saxa superne
sudent umore et guttis manantibu' stillent.
manat item nobis e toto corpore sudor,
crescit barba pilique per omnia membra, per artus. 945
diditur in venas cibus omnis, auget alitque
corporis extremas quoque partis unguiculosque.
frigus item transire per aes calidumque vaporem
sentimus, sentimus item transire per aurum
atque per argentum, cum pocula plena tenemus. 950
denique per dissaepta domorum saxea voces
pervolitant, permanat odor frigusque vaposque
ignis, qui ferri quoque vim penetrare suëvit
denique qua circum Galli lorica coercet.
et, tempestate in terra caeloque coorta, 955
morbida visque simul cum extrinsecus insinuatur,
in caelum terrasque remotae iura facessunt,
quandoquidem nil est nisi raro corpori' nexu.
Huc accedit uti non omnia, quae iaciuntur
corpora cumque ab rebus, eodem praedita sensu 960
atque eodem pacto rebus sint omnibus apta.
principio terram sol excoquit et facit are,
at glaciem dissolvit et altis montibus altas
extructasque nives radiis tabescere cogit.
denique cera liquefit in eius posta vapore. 965
ignis item liquidum facit aes aurumque resolvit,
at coria et carnem trahit et conducit in unum.
umor aquae porro ferrum condurat ab igni,
at coria et carnem mollit durata calore.

barbigeras oleaster eo iuvat usque capellas, 970
effluat ambrosius quasi vero, et nectare tinctus;
qua nil est homini quod amariu' frondeat esca.
denique amaracinum fugitat sus et timet omne
ungentum; nam saetigeris subus acre venenumst,
quod nos interdum tamquam recreare videtur. 975
at contra nobis caenum taeterrima cum sit
spurcities, eadem subus haec iucunda videtur,
insatiabiliter toti ut volvantur ibidem.

Hoc etiam superest, ipsa quam dicere de re
adgredior quod dicendum prius esse videtur. 980
multa foramina cum variis sint reddita rebus,
dissimili inter se natura praedita debent
esse et habere suam naturam quaeque viasque.
quippe etenim varii sensus animantibus insunt,
quorum quisque suam proprie rem percipit in se; 985
nam penetrare alio sonitus alioque saporem
cernimus e sucis, alio nidoris odores.
praeterea manare aliud per saxa videtur, 990
atque aliud lignis, aliud transire per aurum,
argentoque foras aliud vitroque meare.
nam fluere hac species, illac calor ire videtur,
atque aliis aliut citius transmittere eadem.
scilicet id fieri cogit natura viarum 995
multimodis varians, ut paulo ostendimus ante,
propter dissimilem naturam textaque rerum.

Quapropter, bene ubi haec confirmata atque locata
omnia constiterint nobis praeposta parata,
quod superest, facile hinc ratio reddetur et omnis 1000
causa patefiet quae ferri pelliciat vim.
principio fluere e lapide hoc permulta necessest
semina sive aestum qui discutit aëra plagis,
inter qui lapidem ferrumque est cumque locatus.
hoc ubi inanitur spatium multusque vacefit 1005
in medio locus, extemplo primordia ferri

in vacuum prolapsa cadunt coniuncta, fit utque
anulus ipse sequatur eatque ita corpore toto.
nec res ulla magis primoribus ex elementis
indupedita suis arte conexa cohaeret 1010
quam validi ferri natura et frigidus horror.
quo minus est mirum, quod dico, ibus ex elementis,
corpora si nequeunt e ferro plura coorta
in vacuum ferri, quin anulus ipse sequatur;
quod facit, et sequitur, donec pervenit ad ipsum 1015
iam lapidem caecisque in eo compagibus haesit.
hoc fit idem cunctas in partis, unde vacefit
cumque locus, sive e transverso sive superne
corpora continuo in vacuum vicina feruntur.
quippe agitantur enim plagis aliunde nec ipsa 1020
sponte sua sursum possunt consurgere in auras.
huc accedit item (quare queat id magis esse,
haec quoque res adiumento motuque iuvatur)
quod, simul a fronte est anelli rarior aër
factus inanitusque locus magis ac vacuatus, 1025
continuo fit uti qui post est cumque locatus
aër a tergo quasi provehat atque propellat.
semper enim circumpositus res verberat aër;
sed tali fit uti propellat tempore ferrum,
parte quod ex una spatium vacat et capit in se. 1030
hic, tibi quem memoro, per crebra foramina ferri
parvas ad partis subtiliter insinuatus
trudit et inpellit, quasi navem velaque ventus.
denique res omnes debent in corpore habere
aëra, quandoquidem raro sunt corpore et aër 1035
omnibus est rebus circumdatus adpositusque.
hic igitur, penitus qui in ferrost abditus aër,
sollicito motu semper iactatur eoque
verberat anellum dubio procul et ciet intus
scilicet: ille eodem fertur quo praecipitavit 1040
iam semel et partem in vacuam conamina sumpsit.

Fit quoque ut a lapide hoc ferri natura recedat
interdum, fugere atque sequi consueta vicissim.
exultare etiam Samothracia ferrea vidi
et ramenta simul ferri furere intus ahenis 1045
in scaphiis, lapis hic Magnes cum subditus esset:
usque adeo fugere ab saxo gestire videtur.
aere interposito discordia tanta creatur
propterea quia nimirum prius aestus ubi aeris
praecepit ferrique vias possedit apertas, 1050
posterior lapidis venit aestus et omnia plena
invenit in ferro neque habet qua tranet ut ante.
cogitur offensare igitur pulsareque fluctu
ferrea texta suo; quo pacto respuit ab se
atque per aes agitat, sine eo quod saepe resorbet. 1055
illud in his rebus mirari mitte, quod aestus
non valet e lapide hoc alias impellere item res.
pondere enim fretae partim stant; quod genus aurum;
et partim raro quia sunt cum corpore, ut aestus
pervolet intactus, nequeunt inpellier usquam; 1060
lignea materies in quo genere esse videtur.
interutraque igitur ferri natura locata
aeris ubi accepit quaedam corpuscula, tum fit,
inpellant ut eam Magnesia flumine saxa.

Nec tamen haec ita sunt aliarum rerum aliena, 1065
ut mihi multa parum genere ex hoc suppeditentur
quae memorare queam inter se singlariter apta.
saxa vides primum sola colescere calce.
glutine materies taurino iungitur uno,
ut vitio venae tabularum saepius hiscant 1070
quam laxare queant compages taurea vincla.
vitigeni latices aqüai fontibus audent
misceri, cum pix nequeat gravis et leve olivom.
purpureusque colos conchyli iungitur uno
corpore cum lanae, dirimi qui non queat usquam, 1075
non si Neptuni fluctu renovare operam des,

non, mare si totum velit eluere omnibus undis.
denique non auro res aurum copulat una
aerique aes plumbo fit uti iungatur ab albo?
cetera iam quam multa licet reperire! quid ergo? 1080
nec tibi tam longis opus est ambagibus usquam,
nec me tam multam hic operam consumere par est,
sed breviter paucis praestat comprendere multa.
quorum ita texturae ceciderunt mutua contra,
ut cava conveniant plenis haec illius illa 1085
huiusque inter se, iunctura haec optima constat.
est etiam, quasi ut anellis hamisque plicata
inter se quaedam possint coplata teneri;
quod magis in lapide hoc fieri ferroque videtur.

Nunc ratio quae sit morbis aut unde repente 1090
mortiferam possit cladem conflare coorta
morbida vis hominum generi pecudumque catervis,
expediam. primum multarum semina rerum
esse supra docui quae sint vitalia nobis,
et contra quae sint morbo mortique necessest 1095
multa volare. ea cum casu sunt forte coorta
et perturbarunt caelum, fit morbidus aër.
atque ea vis omnis morborum pestilitasque
aut extrinsecus ut nubes nebulaeque superne
per caelum veniunt, aut ipsa saepe coortae 1100
de terra surgunt, ubi putorem umida nactast
intempestivis pluviisque et solibus icta.
nonne vides etiam caeli novitate et aquarum
temptari procul a patria quicumque domoque
adveniunt ideo quia longe discrepitant res? 1105
nam quid Brittanni caelum differre putamus,
et quod in Aegypto est qua mundi claudicat axis,
quidve quod in Ponto est differre, et Gadibus atque
usque ad nigra virum percocto saecla colore?
quae cum quattuor inter se diversa videmus 1110
quattuor a ventis et caeli partibus esse,

tum color et facies hominum distare videntur
largiter et morbi generatim saecla tenere.
est elephas morbus qui propter flumina Nili
gignitur Aegypto in media neque praeterea usquam. 1115
Atthide temptantur gressus oculique in Achaeis
finibus. inde aliis alius locus est inimicus
partibus ac membris: varius concinnat id aër.
proinde ubi se caelum quod nobis forte alienum
commovet atque aër inimicus serpere coepit, 1120
ut nebula ac nubes paulatim repit et omne
qua graditur conturbat et immutare coactat;
fit quoque ut, in nostrum cum venit denique caelum,
corrumpat reddatque sui simile atque alienum.
haec igitur subito clades nova pestilitasque 1125
aut in aquas cadit aut fruges persidit in ipsas
aut alios hominum pastus pecudumque cibatus,
aut etiam suspensa manet vis aëre in ipso
et, cum spirantes mixtas hinc ducimus auras,
illa quoque in corpus pariter sorbere necessest. 1130
consimili ratione venit bubus quoque saepe
pestilitas et iam pigris balantibus aegror.
nec refert utrum nos in loca deveniamus
nobis adversa et caeli mutemus amictum,
an caelum nobis ultro natura coruptum 1135
deferat aut aliquid quo non consuevimus uti,
quod nos adventu possit temptare recenti.

Haec ratio quondam morborum et mortifer aestus
finibus in Cecropis funestos reddidit agros
vastavitque vias, exhausit civibus urbem. 1140
nam penitus veniens Aegypti finibus ortus,
aëra permensus multum camposque natantis,
incubuit tandem populo Pandionis omnei,
inde catervatim morbo mortique dabantur.
principio caput incensum fervore gerebant 1145
et duplicis oculos suffusa luce rubentes.

sudabant etiam fauces intrinsecus atrae
sanguine et ulceribus vocis via saepta coibat
atque animi interpres manabat lingua cruore
debilitata malis, motu gravis, aspera tactu. 1150
inde ubi per fauces pectus complerat et ipsum
morbida vis in cor maestum confluxerat aegris,
omnia tum vero vitai claustra lababant.
spiritus ore foras taetrum volvebat odorem,
rancida quo perolent proiecta cadavera ritu. 1155
atque animi prorsum tum vires totius, omne
languebat corpus leti iam limine in ipso.
intolerabilibusque malis erat anxius angor
adsidue comes et gemitu commixta querella.
singultusque frequens noctem per saepe diemque 1160
corripere adsidue nervos et membra coactans
dissoluebat eos, defessos ante, fatigans.
nec nimio cuiquam posses ardore tueri
corporis in summo summam fervescere partem,
sed potius tepidum manibus proponere tactum 1165
et simul ulceribus quasi inustis omne rubere
corpus, ut est per membra sacer dum diditur ignis.
intima pars hominum vero flagrabat ad ossa,
flagrabat stomacho flamma ut fornacibus intus.
nil adeo posses cuiquam leve tenveque membris 1170
vertere in utilitatem, at ventum et frigora semper.
in fluvios partim gelidos ardentia morbo
membra dabant nudum iacientes corpus in undas.
multi praecipites lymphis putealibus alte
inciderunt ipso venientes ore patente: 1175
insedabiliter sitis arida, corpora mersans,
aequabat multum parvis umoribus imbrem.
nec requies erat ulla mali: defessa iacebant
corpora. mussabat tacito medicina timore,
quippe patentia cum totiens ardentia morbis 1180
lumina versarent oculorum expertia somno.

multaque praeterea mortis tum signa dabantur,
perturbata animi mens in maerore metuque,
triste supercilium, furiosus voltus et acer,
sollicitae porro plenaeque sonoribus aures, 1185
creber spiritus aut ingens raroque coortus,
sudorisque madens per collum splendidus umor,
tenvia sputa minuta, croci contacta colore
salsaque, per fauces raucas vix edita tussi.
in manibus vero nervi trahere et tremere artus 1190
a pedibusque minutatim succedere frigus
non dubitabat. item ad supremum denique tempus
conpressae nares, nasi primoris acumen
tenve, cavati oculi, cava tempora, frigida pellis
duraque, in ore trucei rictum, frons tenta tumebat. 1195
nec nimio rigidi post artus morte iacebant.
octavoque fere candenti lumine solis
aut etiam nona reddebant lampade vitam.
quorum siquis ibei vitarat funera leti,
ulceribus taetris et nigra proluvie alvi 1200
posterius tamen hunc tabes letumque manebat,
aut etiam multus capitis cum saepe dolore
corruptus sanguis expletis naribus ibat:
huc hominis totae vires corpusque fluebat.
profluvium porro qui taetri sanguinis acre 1205
exierat, tamen in nervos huic morbus et artus
ibat et in partis genitalis corporis ipsas.
et graviter partim metuentes limina leti
vivebant ferro privati parte virili,
et manibus sine nonnulli pedibusque manebant 1210
in vita tamen, et perdebant lumina partim:
usque adeo mortis metus his incesserat acer.
atque etiam quosdam cepere oblivia rerum
cunctaram, neque se possent cognoscere ut ipsi.
multaque humi cum inhumata iacerent corpora supra 1215

corporibus, tamen alituum genus atque ferarum
aut procul apsiliebat, ut acrem exeiret odorem,
aut, ubi gustarat, languebat morte propinqua.
nec tamen omnino temere illis solibus ulla
comparebat avis, nec tristia saecla ferarum 1220
exeibant silvis. languebant pleraque morbo
et moriebantur. cum primis fida canum vis
strata viis animam ponebat in omnibus aegre;
extorquebat enim vitam vis morbida membris.
[incomitata rapi certabant funera vasta.]
nec ratio remedi communis certa dabatur; 1225
nam quod ali dederat vitalis aëris auras
volvere in ore licere et caeli templa tueri,
hoc aliis erat exitio letumque parabat.
illud in his rebus miserandum magnopere unum
aerumnabile erat, quod ubi se quisque videbat 1230
implicitum morbo, morti damnatus ut esset,
deficiens animo maesto cum corde iacebat,
funera respectans animam amittebat ibidem.
quippe etenim nullo cessabant tempore apisci 1235
ex aliis alios avidi contagia morbi,
lanigeras tamquam pecudes et bucera saecla.
idque vel in primis cumulabat funere funus.
nam quicumque suos fugitabant visere ad aegros,
vitai nimium cupidos mortisque timentis 1240
poenibat paulo post turpi morte malaque,
desertos, opis expertis, incuria mactans.
qui fuerant autem praesto, contagibus ibant
atque labore, pudor quem tum cogebat obire
blandaque lassorum vox mixta voce querellae. 1245
optimus hoc leti genus ergo quisque subibat.

. . . .

inque aliis alium, populum sepelire suorum
certantes: lacrimis lassi luctuque redibant;

inde bonam partem in lectum maerore dabantur.
nec poterat quisquam reperiri, quem neque morbus 1250
nec mors nec luctus temptaret tempore tali.
Praeterea iam pastor et armentarius omnis
et robustus item curvi moderator aratri
languebat, penitusque casa contrusa iacebant
corpora paupertate et morbo dedita morti. 1255
exanimis pueris super exanimata parentum
corpora nonnumquam posses retroque videre
matribus et patribus natos super edere vitam.
nec minimam partem ex agris is maeror in urbem
confluxit, languens quem contulit agricolarum 1260
copia conveniens ex omni morbida parte.
omnia conplebant loca tectaque; quo magis aestus
. . . .
confertos ita acervatim mors accumulabat.
multa siti protracta viam per proque voluta
corpora silanos ad aquarum strata iacebant 1265
interclusa anima nimia ab dulcedine aquarum,
multaque per populi passim loca prompta viasque
languida semanimo cum corpore membra videres
horrida paedore et pannis cooperta perire
corporis inluvie, pelli super ossibus una, 1270
ulceribus taetris prope iam sordique sepulta.
omnia denique sancta deum delubra replerat
corporibus mors exanimis onerataque passim
cuncta cadaveribus caelestum templa manebant,
hospitibus loca quae complerant aedituentes. 1275
nec iam religio divom nec numina magni
pendebantur enim: praesens dolor exsuperabat.
nec mos ille sepulturae remanebat in urbe,
quo pius hic populus semper consuerat humari;
perturbatus enim totus trepidabat, et unus 1280
quisque suum pro re praesenti maestus humabat.

multaque res subita et paupertas horrida suasit;
namque suos consanguineos aliena rogorum
insuper extructa ingenti clamore locabant
subdebantque faces, multo cum sanguine saepe 1285
rixantes potius quam corpora desererentur.

NOTES.

BOOK I.

INTRODUCTORY, 1–145.

1. Invocation to Venus.

Venus is addressed as the life-bestowing power throughout the realms of being, and is besought to give the poet aid while he sets forth in verse 'the nature of things'; and may she meanwhile also keep back fierce Mars from war, that the Roman folk may enjoy calm peace, and thus Memmius, his country's safeguard, have leisure to con the verses that for him are made. 1–43.

1. **Aeneadum**: 'the Aeneadae,' i. e. the Romans. The short form of the gen. pl. of the first decl. (cf. Gk. -άων, -ῶν) is archaic; it is confined to a few words of Greek origin, nouns in *-gena* and *-cola*, and patronymics in *-des*. Lucretius has both *agricolum* (4, 586) and *agricolarum* (2, 1161 and 6, 1260). The form *Aeneadum*, first met with here, was used later by Vergil, Ovid, and the poets of the decline.[1] — **genetrix**: Venus, as ancestress of the Romans. Veneration was paid to Venus Genetrix particularly by the Caesars, who claimed descent from her. Julius Caesar embellished his new forum by a temple to her, in which was placed a statue of the goddess by Arcesilaus; and a representation of her was also stamped on coins. See Mitchell, 'Hist. of Ancient Sculpture,' p. 666. There is a statue of Venus Genetrix (Venere Genetrice) at Florence. — **divom**: *-um*

[1] In the notes A. stands for Allen and Greenough's Grammar, G. for Gildersleeve's, H. for Harkness'; edd. is used for 'editors.' The other abbreviations will, it is thought, be readily understood.

in the gen. pl. of the second decl. is not a contracted form, but the original Italian ending, which in Latin became *-om* after *v*. It was later in Latin superseded by *-orum*. See Roby, 'Latin Grammar,' § 365. Lucr. has *deorum* but once (6, 54), though *divom* and *deum* are found many times without difference of meaning. The poet's choice between the different forms was perhaps governed by the metre. — **voluptas**: Venus as goddess of love could with propriety be called *hominum divomque voluptas*; for the ancient mythology pictured the gods with the same joys and passions as men. See the striking passage in Cic. N. D. 1, 16, 42. Cf. 6, 94 *requies hominum divomque voluptas*, where Calliope is invoked. 2. **alma**: 'increase-giving.' The gliding movement of the verse well suits the sense.

Venus: the Epicureans believed not at all in the influence of the Divine over the affairs of men. Why, then, does Lucretius begin his poem with an invocation to Venus? The question is not an easy one to answer. It was the custom of the poets to preface any important work with an address to the gods or some particular divinity for inspiration. Prose writers, too, sometimes followed their example. Varro opens the 'De Re Rustica' with a labored prayer to the gods of the farmer. Whatever may have been the motive of such invocations at first, after the decline of the old religion in Greece and Rome to educated readers and hearers they no longer suggested any thought of the real presence of the Divine; they furnished merely an occasion for the dignified display of a bit of literary finery. Hence the spiritless invocation of Ovid at the beginning of the Metamorphoses; instances of the like, with many others, some graceful and some dull, may be found in the writings of his contemporaries and the poets of the decline. Of similar character is Lucretius' address to Calliope, quoted above. But while Lucretius in thus opening his poem was conforming to the example of the poets from Homer to Ennius, with him it was not a matter of display or trifling. These lines breathe an intense earnestness. Filled with bright images, they hurry the thought along with resistless force. What, then, the secret of their power?

Lucretius conceived of the world as under the reign of law (see n. to 1, 586). Not chance, but fixed order, — inconsistent as this may appear by the side of his doctrine of the atom, — seemed to him the key to the mysteries of the operations of nature. To him, as to thinking men of all ages, the strangest thing in all the mecha-



nism of the universe was the production and on-going of life. Whence its origin? In a fortuitous combination of atoms, indeed. Yet was it not a part of the great system of law? Unconsciously, perhaps, poet-philosopher as he was, Lucretius came to see in nature a mysterious, elusive, but all-pervading principle, almost a personality, that presided over being. Before the majesty of this generative power he paused in awe. For him its range and sweep were sea and earth and sky, wherever living thing might be. Spring was the glad season of its quickening advent, and all nature owned its genial sway (see l. 21). This principle, all-pervasive, all-persuasive, the poet invokes under the name of Venus, — not as an empty form of words, nor to get aid from it as a divine personality, but by rapt contemplation of its power to draw inspiration for his theme. In all this, however, with true poetic skill he does not present us with abstractions. With the address to Venus he interweaves mythologic conceptions that had their centre in her. Thus he addresses her as 'ancestress of the Romans,' — a phrase to tickle the ears of his fellow-countrymen. He pictures her as bringing the War-god under her control, and bids her keep him from the fray; and touches here and there reveal to us Venus as goddess of love. In exalting Venus, moreover, he pays honor to the Memmii, of whom she seems to have been the patron goddess; their coins bear image of her (see Munro, 'Lucretius,' 3d ed. i. 328). Thus with the poetic spirit deeply stirred within him, the poet has skilfully wrought into combination a grand philosophic idea and conceptions which would enlist the interest and sympathetic attention of his readers, particularly Memmius, to whom the poem was addressed. This invocation to Venus is translated by Dryden in a spirited version (Aldine ed. of Dryden, iii. 145). It is imitated by Spenser, 'Faerie Queene,' Bk. 4, Canto 10, st. 44–47. Cf. also Chaucer, the second song of Troilus in 'Troilus and Cressida,' Bk. 3, near the end. Consult Sellar, 'Roman Poets of the Republic,' p. 343 *et seq.* 3. **frugiferentis**: found only here. 4. **concelebras**: 'causest to teem with life,' or 'fillest with thy presence'; the latter rendering is Munro's. Both renderings are involved in the meaning of the word here, as Venus is the universal life principle. *Concelebrare* first meant 'to crowd,' 'to cause' a place 'to throng' with beings; then 'to fill,' 'cause to abound,' a sense in which it is used 5, 1381. — **per te**: 'through thee'; the phrase expresses indirect agency, while *ab* generally implies the

direct exercise of power. — **quoniam** etc.: this clause (often misunderstood) stands, in thought as in position, closely connected with *concelebras*. — **animantum**: stems in *i* preceded by a dental, except those of one syllable, are sometimes in the poets found with gen. pl. in *-um*. The reason may lie in the requirements of the verse, though *parens* and a few others have the gen. pl. in *-um* in prose. Cicero wrote *animantium*. Cf. n. to 3, 573. **5. exortum**: 'rising up' into existence. *Exoriri* is often employed by Lucr. in this philosophic sense. — **lumina**: poetic use of pl. where prose and the English idiom would prefer the sing. Perhaps there is in the pl. a distributive force that brought before the Latin mind the conception of rays.

6. caeli, 7. tellus, 8. ponti: the three grand divisions of the universe, frequently met with in classical and even in modern writers. By considering *caelum* as composed of *aër* and *aether*, the atmosphere and the pure upper air, the poet elsewhere assumes the fourfold structure of the world recognized by philosophers and poets alike. This last division is closely connected with the idea of the four primal elements, earth, water, air, and fire, which after the time of Empedocles, held so important a place in cosmological speculations. Ovid also, in his account of the creation (Met. 1, 1–124), first mentions the three parts of the universe, then the four. Cf. 2–3, above; 5, 416–17, 449, *et seq.*; 1, 714 *et seq.* **7. suavis**: Lucr., as the other Latins of the classical period, wrote the acc. pl. of *i*-stems in *-es* or *-is* indifferently. The ending *-eis*, rarely found except in Prae-Augustan inscriptions, was incorrectly printed in old editions. Cf. *frugiferentis* above. — **daedala**: the epithet may refer either to the earth's power of manifold production, or to its variegated appearance resulting therefrom. Edd. quote here the explanation of 'Paulus ex Festo,' p. 68, 6, *daedalam a varietate rerum artificiorumque dictam esse apud Lucretium terram, apud Ennium Minervam, apud Vergilium Circen, facile est intellegere, cum Graece* δαιδάλλειν *significet variare.* Tr.: 'manifold of works,' a meaning that well suits the active force of *summittit*. Cf. 5, 234 *natura daedala rerum*; 4, 551 *verborum daedala lingua*. **8. rident**: a favorite word of our poet. Cf. 5, 1004–5, and n. **10.** April as the first month of Spring was regarded by the Romans as sacred to Venus. So in all ages spring-time and Love have been associated. Cf. the graceful lines of Tennyson in 'Locksley Hall.' — **patefactast**: = *patefacta est*. *Est* after a word ending in a vowel or *m* often lost the initial *e*, being pronounced and written with the preced-

ing word. This usage is especially common in the comic poets. 11. **reserata**: 'unbarred.' The *sera* was a strong wooden or iron bar that was placed across the front door of the Roman house at night, and fastened to the posts on either side.—**favoni**: the gen. sing. of nouns in *-ius* and *-ium* in Lucr. always ends in *ī*. The gen. ending *i-ī* first appeared toward the close of the Republic, and did not become common till the earlier part of the Empire. Favonius (from *faveo*, '*quia favet rebus nascentibus*'), also called Zephyrus after the Greek, was the west wind, the blowing of which marked the opening of spring. Cf. Plin. N. H. 18, 34, 77, *hic* (*ventus*) *ver inchoat aperitque terras tenui frigore saluber, hic vitis putandi frugesque curandi, arbores serendi, poma inserendi, oleas tractandi ius dabit adflatuque nutricium exercebit.* See also id. 16, 25, 39. 12. **aëriae . . . volucres**: like the Scriptural "fowls of the air"; cf. 5, 825. Burton, 'Anatomy of Melancholy,' Part 3, sec. 2, memb. 1, quotes ll. 12–13, and compares with them quotations from many writers, ancient and modern, on the power of love. Munro compares Chaucer, 'Cant. Tales' Prol.:—

> "And smale fowles maken melodie . . .
> So priketh hem nature in here corages."

13. **perculsae** etc.: cf. 1, 261 *mentes perculsa novellas.* Observe the force of *per* here, 'smitten through and through." *Per* alone and *per* in composition have the same relation in meaning as our 'through' and 'thorough,' which are merely different forms of one original word. 14. Alliteration, not uncommon in the Latin poets of all periods, is a marked feature in the verse of Lucretius, as well as that of Ennius and Naevius. It is, however, so skilfully employed by our poet that it never becomes cloying, and is often very effective. Here the hard strokes of the *p*-sound through the ear aid the mind in forming a vivid conception of the bounding of the herds over the fields. Cf. 5, 993. See also Peile, 'Introd. to Greek and Latin Etymology,' 3d ed. ch. 6. 15. **capta** agrees with the subject to be supplied for *sequitur* from *quamque.* The ordinary construction would be *quaeque* (*pecus*) . . . *te sequitur quo eam inducere pergis*, or *quo quamque ind. per. capta . . . te seq.* Cf. 2, 318. See Roby, 'Grammar,' 1432, 6. After 15 most of the edd. before Lachmann inserted the spurious line *Illicebrisque tuis omnis natura animantum*, which crept into the text from an attempt to make *capta* etc. intelligible. **20. generatim**: 'kind by kind.'—**saecla**: Lucretius always has

the syncopated form. **21. quae**: the necessary English trans. 'thou' fails to bring out the relation with the preceding thought which the relative in the more accurate and subtle Latin idiom expresses.

rerum naturam: Lucretius uses *natura* in many different senses. Here and in 25 by *natura rerum* is meant what we often understand by 'nature,'—the sum and system of things existent; as Humboldt defines it ('Cosmos,' tr. by Otté, Introd.): "Nature considered *rationally*, that is to say, submitted to the process of thought, is a unity in diversity of phenomena; a harmony, blending together of all created things, however dissimilar in form and attributes; one great whole (τὸ πᾶν) animated with the breath of life." Often our poet personifies nature, regards her as a mysterious living presence, that "makes herself felt as a peculiar and independent power." Cf. especially 2, 1090–92: 'If you keep in mind these things well thought out, nature untrammelled at once and free from haughty masters is seen of her own accord by herself without the power of the gods to do all things.' The idea of a will behind all movement is so firmly impressed upon the minds of men that, strive as they may to believe in pure chance or necessity, they generally end by personifying something. Fate in antiquity was only a personification of natural law. It is a significant fact that materialists of our own time often spell matter and evolution with capital letters. Evolution, a process, takes the place of a deity, and matter is thought to contain the "promise and potency of all terrestrial life" (Tyndall). "It seems almost a matter of taste whether we worship the masculine God, the feminine Nature, or the neuter All." Lange, 'Hist. of Materialism,' tr. iii. 340. On Lucretius' conception of Nature as a personality, see Ritter, 'Hist. of Ancient Philosophy,' Bohn's ed. iv. 87–88. Lucr. also uses the word *natura* to express 'natural constitution' of a thing, 'substance,' and the like.

22–3. quicquam . . . exoritur neque fit . . . quicquam: observe the chiasmus. A. 344, *f*; G. 684; H. 562. A like arrangement of words often adds a charm to English style, as in Milton's "dulcet symphonies and voices sweet." **22. luminis oras**: a favorite expression of Lucr., by which he suggests the dim borderland between that which is and that which is not, the existent and the non-existent. See Munro's note. **25. de rerum natura**: whence Lucr. drew the title of his work can only be conjectured. Περὶ φύ-

σεως was the subject of many Greek works, in both prose and verse, from the time of Anaximander down. It stood as title probably to the philosophic poem of Xenophanes, certainly to that of Parmenides, and the most important one of Empedocles. Empedocles' περὶ φύσεως both furnished a model and gave inspiration to our poet, who in several places shows traces of its influence. See 1, 716 *et seq.*, and nn. Epicurus also left a treatise in thirty-seven books having the same title. See Diog. Laert. 10, 17, 27. Fragments of it are extant in the work of Philodemus, deciphered from the charred rolls discovered at Herculaneum. Moreover, prior to Lucretius, Amafinius set forth in barbarous Latin the physical doctrines of Epicurus, though under what title or titles is not known. On the whole, then, the title *de rerum natura* being in harmony with the subjects chosen for their works by his philosophic predecessors, probably suggested itself to our poet as the one best suited to his theme; and thus was not, as it has been asserted, taken directly from Epicurus' περὶ φύσεως. — **pangere**: first applied to the writing of poetry perhaps by Ennius. See the famous epigram on himself given in Cic. Tusc. Disp. 1, 15, 34 (Vahlen's edit. of Enn. p. 162) *hic vestrum panxit maxima facta patrum*. See n. to 1, 117. Cf. 1, 933; 4, 8.

26. **Memmiadae**: like *Scipiadas* (3, 1034), a word of irregular formation, having a Greek patronymic termination added to a Latin stem. Gaius Memmius, to whom Lucretius dedicates his poem, and of whom he speaks in terms of the sincerest regard, was a prominent figure in the politics of the time. The Memmian gens was of plebeian origin, and of little note till the Jugurthine war. About that time Gaius Memmius, the grandfather of Lucretius' friend, made himself famous by strenuous and unyielding opposition to the aristocratic party. He exposed its corruptions, impeached several of its leading men, and finally as candidate for the consulship met a violent death at the hands of a mob led by Saturninus, — the incident referred to by Cic. in Cat. 4, 2. After this the name is often met with in Roman annals till the close of the Republic. The Memmius referred to here was a man of power, but utterly lacking in principle. The date of his birth is not known; but he was plebeian tribune in 66, and won distinction by opposition to the triumph demanded by Lucullus returning victorious from the war with Mithridates, on the ground that the booty had been wrongfully turned to private gain and the war unnecessarily prolonged. The charges were so well sustained that,

notwithstanding Lucullus' popularity, the triumph was obtained only with the greatest difficulty. As praetor in 58 Memmius showed the same spirit and courage, which, however, were devoted to purely partisan and selfish ends. Though he bitterly attacked Julius Caesar at this time, later seeing it would be to his advantage to join Caesar's party he shamelessly went over to it, and accepted the aid of his former enemy in presenting himself as candidate for the consulship in 54. He soon proved faithless to Caesar, and being impeached for election bribery he left Rome in disgrace, and went to live at Mitylene. This happened after Lucretius' death. Memmius had some power as an orator; but Cicero says of him that his adherence to Greek models and his dislike of hard work interfered with his success in this direction. He dabbled in verses of questionable propriety, and his life was grossly immoral. Probably it was the dash and audacity of his public career that attracted the admiration and drew the sympathy of the quiet poet-philosopher, whose earnest patriotism perhaps imagined in him a great reformer. It does not seem that he had any special liking for Epicurean views; indeed, the opposite might be inferred from one of Cicero's letters (Ad Fam. 13, 1). Nor was he famous as a patron of literature. But from what we know of his character and life, we may suppose that he was one who would gladly welcome the doctrine of eternal death, and a world without a deity. — **nostro**: 'our' in the sense of 'our fellow-countryman'; a common use. It may be that personal friendship is implied. — **omni**: with nouns like *tempus* the distributive sense of '*omnis*' applies to parts instead of units. Here the meaning is 'at every moment' or 'point' 'of time,' i. e. 'always,' 'ever.' The phrase should be taken in close connection with *ornatum*.

29. **moenera**: old spelling for *munera*. By the use of occasional archaisms Lucr. gives his style an antique aroma. — **militiai**: the gen. of the first decl. in Lucr. has very often the old ending *ai*, which is scanned as a spondee. A. 36, *a*; G. 27, Rem. 1; H. 49, 2; Roby, 356, (c). 31 *et seq.* This contrast between Love and War as powers shaping the world's destiny suggests the antithesis between Love and Strife (Φιλία or Φιλότης and Νεῖκος) that runs through the philosophy of Empedocles. 32. **Mavors**: old and fuller form of *Mars*, found also occasionally in the later poets. 34. **vulnere amoris**: *vulnus amoris* became later a stock phrase in Roman literature. Its origin is to be traced in the conception of Cupid (Eros) by the later

Greek poets, who represented him as armed with arrows and torches. See Theocritus, Id. 23, and cf. Ov. Trist. 5, 1, 22. 35. **cervice**: i.e. *Martis*. — **reposta**: for *reposita*, 'thrown back.' It has been conjectured that in this description the poet had in mind some painting, perhaps one of those that formed part of the decoration of temples. 36. **visus**: for *oculos*. 37. Order of trans. *et spiritus* (*illius*) *resupini pendet ex tuo ore*. 38. **hunc**: governed by *circum* in *circumfusa*; *super* is used adverbially: 'shed thyself about him and above.' 39. **loquellas**: the suffix *-ēla* is in good MSS. written *-ella* when the preceding syllable is short. Thus *lŏquella*, *quĕrella* is a better spelling than *loquēla*, *querēla*, commonly given in the dictionaries. On the other hand, we should write *tūtēla*, *suādēla*. See Roby, 177, 2; Lachmann, n. to Lucr. 3, 1015. 40. **incluta**: 'glorious'; an epithet rarely applied to a divine being. Lucr. uses it also with reference to Epicurus (3, 10) and Memmius (5, 8).

41–43. Various conjectures have been made regarding the time to which these lines refer. That of Munro is the most likely to be correct; he thinks "that Lucr. was writing these lines towards the close of 695, or four years before his death, when Caesar was consul, and had formed his coalition with Pompey. Memmius was then praetor designatus, in fierce opposition to Caesar, and at that time on the side of the Senate with Cicero, and doubtless Lucretius. There was almost a reign of terror." 41. **hoc**: interpret from ll. 24–5. 42. **Memmi**: for the form see n. on 11 *favoni*. 43. **desse**: = *deesse*; *e* + *e* is often contracted to *ē*. So in syncopated perfects, as *delērunt* for *delevērunt*, *deleērunt*. So generally *dērat*, *dest* for *deerat*, *deest*. Cf. 1, 711, *derrasse* for *deerrasse*. In 3, 861 *deerrarunt* both vowels are retained, but are scanned as one. 44–49. The six lines printed here in the old editions = 2, 646–651. Isaac Vossius was the first to notice that they were inserted here to show the inconsistency of the poet in addressing a divinity at the beginning of the work in which he maintains that 'every nature of the gods must in itself of necessity enjoy immortality in deepest peace, far removed and withdrawn from concerns of ours; for free from every pain, from dangers free, powerful in its own resources, in nothing needful of us, it is neither won over by favors nor stirred by anger.' Lachmann and Munro agree that after 43 a few lines have been lost that furnished the transition to what follows. In them Memmius must have been addressed.

2. Unfolding of the Purpose and the Subject of the Poem.

The Purpose, by the Aid of Reason, to free Mankind from the Ills of Superstition.

The Poet bids Memmius listen to True Reason, and heed while he shall tell of the Primal Elements of Things. 50–61.

50. **quod superest**: a common expression in Lucr., indicating the completion of a topic and introducing a final statement. It is equivalent to an adverbial acc.; lit. 'as to what remains'; tr. 'for the rest.' 51. **veram rationem**: i.e. the Epicurean philosophy. It was not alone the ancient materialists that thought they had found the true reason; Haeckel speaks of the "unassailable truth" of the Theory of Descent. See the 'Natural Hist. of Creation,' trans., ii. 334. 52. **disposta**: cf. *reposta* above; *dispŏsĭtă* could not stand in hexameter verse. 54. **ratione**: *ratio* in Lucr. has many different meanings. The most important are 'order,' 'system,' as here; 'reason,' as in 51; 'way,' as in *aliqua ratione* and the like. 55. **primordia**: 'the first-beginnings,' i.e. the atoms, the primal or ultimate elements of things. Lucr. does not use the word *atomi* (Gk. ἄ-τομος, 'that which cannot be cut'), which was introduced into Latin by Cicero; see Plut. Cic. 40; Cic. De Fin. 1, 6. *Primordia* (once written *ordia prima*, 4, 28) is the favorite term of the poet; but as *primōrdĭōrum*, *primōrdĭīs* cannot be used in hexameter verse, in the gen., dat., and abl. he substitutes *princĭpĭōrum* and *princĭpĭīs*. It corresponds to αἱ ἀρχαί of Epicurus. As synonyms Lucr. has *genitalia corpora* 'begetting bodies,' *corpora prima* 'first bodies,' *semina rerum* 'seeds of things,' and *cunctarum exordia rerum* 'the beginnings of all things,' because all things are made up of atoms; also *materiem* and *corpora materiai*, because he conceived of matter only as composed of atoms. He uses the sing. *principium* in characterizing the physical systems of other philosophers, as 1, 707; *primordium* is not found in Lucr. Cf. n. on 1, 525 *plenum*. 56. **unde**: = *e quibus*. *Unde* is often used this way, of persons as well as things, in both prose and verse; so in Gk. ὅθεν and ὅθενπερ. — **omnis**: goes with *res*. — **natura creet** etc.: with the personification of nature here cf. Büchner, 'Force and Matter,' trans., p. 88: "Nature, the all-engendering and all-devouring, is its own beginning and end, birth and death; she produced man by her own power, and takes him again."



57. **quo** : = *in quae*, as often. Like *unde*, *quo* is sometimes applied to persons; cf. Cic. De Sen. 23, 83 *illos . . . quo quidem me proficiscentem haud sane quid facile retraxerit.* 54–7. Seneca quotes these lines, and says of the thought (Ep. Mor. 95, 10–11) *erras enim, si tibi illam* (*philosophiam*) *putas tantum terrestres operas promittere: altius spirat. 'Totum,' inquit* (*philosophia*), *'mundum scrutor nec me intra contubernium mortale contineo suadere vobis ac dissuadere contenta. magna me vocant supraque vos posita.'* Cf. below 127 *et seq.* 58. **materiem** : of this word Lucr. uses two stems, *materie* and *materia*, without difference of meaning; the former is found only in the nom. and acc.; the *a*-stem is met with twice in the acc., often in the gen., a few times in the abl., but does not occur in Lucr. in the nom. — **rebus** : dat. after *genitalia.* 59. **reddunda**: archaic for *reddenda;* so 1, 707 *gignundis.* H. 239. 60. **suemus**: contracted perfect; so 1, 301; 4, 369. See n. on 70 *inritat.* For pronunciation, see n. on 216 *dissoluat.*

When human life lay grovelling under religion, it was a Greek who first forced from Nature her secrets, and made men able to trample religion under foot in turn. 62–79.

62 *et seq.* For the attitude of the Epicureans toward religion, see Introd. The conception of the Divine and the belief in a hereafter are deeply impressed upon the constitution of man. It is a characteristic of human nature to hate one whom you have injured (Tac. Agr. 42). The Epicureans, however sincere may have been their search after the truth, in doing violence to the instinctive outreaching of the soul after God and immortality, felt enraged at the manifestation in others of those beliefs they themselves affected to contemn. The spirit of this passage is well shown by Taylor Lewis, 'Plato against the Atheists,' Excursus lix.: "The very efforts of the Epicureans to ridicule the vulgar fears, and to make light of the terrors of the unseen Hades, show how deeply these awful truths, whatever their origin, had penetrated the human soul. Even the style in which Lucretius speaks of them betrays a secret trepidation, and, instead of philosophic indifference, manifests that bitter hatred which proceeds from a mind at once deeply troubled, anxious, and yet unable to shake off those fears which its philosophy affects to despise." Hence the repetition throughout the poem of the indifference of the gods regarding the affairs of men, and the groundlessness of the fear of death. Cf. below 151–8; 3, 16–37 and nn.;

5, 1161–1245 and nn.; 2, 54 etc. Burton's discussion of religious melancholy, 'Anat. of Melan.' Part 3, sec. 4, contains many quaint and suggestive observations on the fears inspired by religion or the lack of it. **62. ante oculos**: a forcible expression in emphatic position; tr. 'in plain sight.' **65. super**: adv., as in 39, 'overhead,' 'above.' The poet seems to have seen in imagination some vast lowering presence like the cloud-forms so graphically described in 4, 129–142. **66. Graius homo**: Epicurus. For his philosophy see Introd.; on the extravagant praise bestowed on him by his followers, see n. on 3, 3 *te*. — **mortalis**: with *oculos*. — **contra**: adv., in sense = *contra illam*. In Lucr. *contra*, *ante*, *post*, *super*, *supera* (*supra*), and *subter* are oftener adverbs than prepositions. *Circum*, *extra*, *inter*, *praeter*, *propter* are also frequently adverbs. Holtze, 'Syntaxis Lucretianæ Lineamenta,' cap. 4, gives abundant illustrations of the different uses. **68. fama**: Bentley, whom Lachmann follows, reads *fana* instead of *fama*; because, as Lachmann says, *scilicet fama non omnis necessario magna est*. *Fama* not only has the authority of the MSS., but also gives better sense; for it was not so much the existence of gods or shrines of the gods as the unfounded story of them, that inspired fear.

70. inritat: *inritāt* for *inritavit*; so 6, 587 *disturbāt* for *disturbavit*. See Roby, 'Gr.' 662. The contracted perfect in the third pers. sing. and first pers. pl. of the indic. is rare; for examples see Neue, 'Formenlehre,' 2d edit. ii. 534. Cases like *inritāt* must be carefully distinguished from *versāt* (Enn. Ann. *quae . . . versāt in pectore fixa*, Cic. De Sen. 1, 1; Vahlen's Enn. 340) and the like, where the original *ā* of conj. 1 is retained in the present tense. Instances of the latter use are not uncommon in Plautus, and are occasionally met with in the poets of the Augustan Age. See Corssen, 'Aussprache,' 2d edit. ii. 488; also Neue, *ut sup.* ii. 433–4. **72. viv. vis an.**: a striking expression, especially for one who considered mind and soul only a form of matter. **73. processit**: supply *ille*, referring to Epicurus; so *peragravit* below. — **moenia mundi**: the fire-belt, or aether, that many of the ancients thought formed the outer enveloping portion of the world. Epicurus did not assign to this definitely the nature of fire; in his letter to Pythocles (Diog. Laert. 10, 25, 88) he says that the world is a kind of extent girt by the heaven, embracing both stars and earth and all things visible; that it is separated from the infinite, and is confined within a limit, in texture either rare or

dense, by the dissolution of which all things embraced in it will be involved in destruction. Cf. Plut. Plac. 2, 7, 3. This limit or enveloping sphere Lucr. identified with the aether, in which, as the outer place, the lighter, fiery elements of the world gathered. See 5, 454–494 and nn.; cf. also 2, 1066. By *mundi* here the poet probably means the world, not the universe (for which *mundus* was often used by the Stoics, but never by the Epicureans) nor the heavens. The Epicureans believed in an infinite number of worlds; see Lucr. 2, 1052 *et seq.* "Epicurus carried himself in thought beyond this visible universe, and well knew that there are innumerable other worlds besides the one we inhabit, and that the heaven does not form the extreme boundary of the whole nature of things." Dr. Mosheim's note on Cudworth's 'Intellectual System of the Universe,' iii. 481. The Stoics taught that the world and the universe are the same, — a compact sphere, bounded by aether, outside of which space extended on all sides to infinity. See n. to 958. Cf. Manilius 1, 194 *et seq.*; Plin. N. H. 2, 1, 1. 74. **omne immensum**: 'the immeasurable universe'; *omne*, as often in Lucr., = τὸ πᾶν, 'the universe,' as distinguished from *mundus*. — **mente animoque**: see n. on 3, 94. 75–77. 'Whence as conqueror he brings back report of what can rise into existence, what cannot; in short, on what principle for each thing its powers and limit deeply fixed have been marked off.' These lines are repeated with slight changes 1, 594–6; 5, 88–90; 6, 64–66. Infinite power can only be conceived of as an attribute of the Divine: hence, perhaps, the poet's anxiety to impress the thought that everything is limited, finite; that there is no infinite power in anything.

79. **opteritur**: no rule can be laid down as to the assimilation of *b* before *t*. Cf. 6, 92 *praescribta*. — **exaequat** etc.: This position of the Epicureans is suggestive of the parallel the Stoics were fond of drawing between the wise man and the gods. Cf. Sen. De Prov. 1, 5 *bonus tempore tantum a deo differt;* see also Ep. Mor. 73, 11–14; Epic. Dis. 1, 12, 26. The Epicurean doctrine, however, was based upon the belief that gods as well as men are of limited powers, and that men are practically the highest existences; the Stoic, upon this, that the gods are like men subject to fate; and that the wise man, being possessed of reason, has in himself all resources for 'living happily and well.' Could even a god be more independent than that? Both conceptions reflect the anthropomorphic tendency of the ancient Greek

and Roman beliefs. Not unlike the sentiment of the text is that of the Italian Pomponatius (died 1525), who declared "philosophers alone to be gods of the earth, and as far removed from all other men, of whatever condition, as real men are from painted men." See Lange, 'Hist. of Materialism,' Am. edit. 1, 225.

Fear not impiety in thus casting away religion; religion herself has caused the foulest crimes. Witness Iphigenia, slain by her sire to appease Diana's wrath. 80–101.

80. Illud: refers to something following, — a common use in both prose and verse. A. 102, *b*; G. 292, Rem. 1; H. 450, 3. *Illud in his rebus* is a favorite phrase of our poet in introducing a new point. Cf. 1, 370; 1, 1052; 3, 370 etc. **81. inpia**: less common than the assimilated form *impia*. The early Romans met with stern disfavor anything that tended to weaken the hold of the old religion upon the people. Cato the Censor viewed with alarm the stay of Carneades and his fellow-philosophers at Rome, though they were on public business. In the poet's day, however, the educated classes no longer accepted literally the myths of the old faith, and the public religious rites became merely an instrument in the hands of designing politicians for controlling the credulous masses. It is not likely that Memmius and his friends would have been greatly shocked by any doctrine the poet might propound; but this passage shows wonderful skill in meeting possible prejudices, and arousing the feelings to a favorable reception of whatever might follow. **82. indugredi**: = *ingredi*. *Indu* and *endu* are old forms for *in*. The Twelve Tables have *endo* with both acc. and abl. Ennius uses *endo* with the acc., *indo* with the abl. Plautus has *indu* only in the verb *indaudire*. Lucr. has *indu manu* (2, 1096), *endo mari* (6, 890) and *indu manus* (5, 102), besides *indu* in several compounds. The old form survived to the Classical period in such words as *indigeo, indigena, industria.* — **quod contra**: = ὃ τοὐναντίον 'whereas on the contrary.' *Contra* is here an adv., as generally in ante-classical writers; *quod* is merely a connecting link between the clauses, as in *quod si* at the beginning of sentences and clauses and the like; it was originally an adv. acc., or perhaps, as some maintain, an abl. in the sense of *qua re, quam ob rem.* Cf. Cic. De Sen. 23, 84; De Am. 24, 90 and Reid's n. Cf. also use of ὃ in Thuc. 2, 40 ὃ τοῖς ἄλλοις ἀμαθία μὲν θράσος κτλ., and the 'which' often in vulgar English. See Roby 1897 and foot-n. for the common view that *quod* is governed here by *contra* out

of place. Cf. 1, 221 *quod nunc*. 84. **Triviai virginis**: Diana (or Hecate), whom the Romans completely identified with the Greek Artemis. She was called *Trivia virgo* or simply *Trivia*, because worshipped and invoked at places where three ways met. Cf. Verg. Aen. 4, 609 *nocturnisque Hecate triviis ululata per urbes.*

85. **Iphianassai**: *Iphianassa* = Ἰφιάνασσα, Homeric for Ἰφιγένεια, Iphigenīa, the daughter of Agamemnon and Clytemnestra. When the Grecian fleet was gathered at Aulis in Boeotia for the expedition against Troy and detained by storms, Chalcas being summoned declared that Agamemnon had given offence to Diana, and that this could be atoned for only by the sacrifice of his daughter Iphigenia to the goddess. Thereupon, under pretence of marriage to Achilles, the maid was brought to Aulis; but just as she was about to be offered up Diana bore her on high to Tauris, where she became a priestess in the temple. This is the common form of the legend; but Lucr., to add force to his argument, assumes that she was really sacrificed as a victim. The story of Iphigenia was a favorite theme of the classic writers. It formed the basis of a master tragedy by Euripides, and in modern times has been splendidly handled by Racine in his 'Iphigénie en Aulide,' and by Goethe in the 'Iphigenie auf Tauris.' 86. **prima virorum**: = τὰ πρῶτα τῶν ἀνδρῶν. The use of the partitive gen. after the neuter pl. of an adj. is very common in Lucr., taking the place of the ordinary constr. of a noun with adj. in agreement. Madvig, 'Lat. Gr.' 284, Obs. 5; A. 216, 4, *b*; G. 371, Rem. 7; H. 438, 5. *Prima virorum* = *primi virorum*; trans. keeping the poetic constr. 'first of men,' 'foremost of men.' The partitive idea in such cases often entirely disappears; cf. 1, 659 *vera viai* = *veras vias.* Cf. Verg. Aen. 1, 422 and Conington's note. 87. **simul**: for *simul ac*; so 89 below. Cf. Cic. Arat. 348 (594) *quae simul existant, cernes.* — **infula**: the fillet worn by priests and victims alike was made by twisting loosely together strands of red and white wool; these were tied into a band of wool (*vitta*) that encircled the head, and were allowed to hang down. The sacrifice is here described as in the Roman fashion; for which consult Ramsay, 'Manual of Roman Antiquities, p. 340 *et seq.* — **comptus**: after *circum* in *circumdata.* 88. Order of trans., *ex utraque malarum, pari parte*; the strands of the *infula* hung down of equal length.

89. **parentem**: i.e. Agamemnon. 90. **sensit**: the subject is Iphigenia. — **hunc propter**: on the order see A. 263, n.; G. 404;

II. 569, II. 1; on the uses of *propter* see n. to 65. — **ferrum**: the sacrificial knife. **91. suo**: 'of her.' **94. patrio**: i.e. *patris.* — **princeps**: = *prima*; cf. Liv. 21, 4 *Hannibal princeps in proelium ibat, ultimus conserto proelio excedebat.* Iphigenia was oldest of the children of Agamemnon. With this line Lambinus compares Eurip. Iph. Aul. 1222 πρώτη σ' ἐκάλεσα πατέρα καὶ σὺ παῖδ' ἐμέ. See also Munro's note. **95–98.** In these lines edd. notice the subtle contrast between the joyful wedding-scene for which the girl supposed she had come to Aulis and the terrible reality of her doom, — a contrast heightened by the studied use of terms common to both marriage and sacrifice. **95. sublata** etc.: there is an implied reference to the symbolic seizure of the bride from her mother in the wedding ceremony, and perhaps to the carrying of the bride over the threshold of her husband. For this and the other marriage ceremonies alluded to, see Becker, 'Gallus' exc. 1, sc. 1; also Ramsay, 'Man. of Rom. Antiq.' **96. deducta**: this word was also used of the ceremonious conducting of the bride to her new home. — **sacrorum**: one form of the Roman marriage was celebrated by the sacrifice of sheep (Becker, *ut sup.* p. 158), and could not be properly concluded without the taking of auspices. **97. claro**: refers to sound; 'clear-ringing.' — **comitari**: passive. — **Hymenaeo**: 'nuptial song.' As the bride the evening of the wedding day together with her husband left her father's house, a throng with torches chanting the marriage-song escorted them to their new home, and sang as they entered it. Catullus (Carm. 62) has left us a splendid specimen of the *carmen nuptiale*, in the form of a choral chant, with youths and maidens responding alternately. **98. casta inceste**: 'sinless sinfully.' For the paronomasia cf. 3, 1015 *insignibus insignis*; 2, 1054 *innumero numero*; 2, 1086. **99. mactatu**: found only here. **100. exitus**: i.e. from Aulis. — **felix faustusque**: these words were often coupled together in old formulas of prayer, to which the early Romans attached great significance, and with which they began all transactions or work of importance. Cf. Cic. Div. 1, 45, 102 *hominum, quae vocant omina; quae maiores nostri quia valere censebant, idcirco omnibus rebus agendis 'quod bonum, faustum, felix fortunatumque esset' praefabantur.*

Nor let dire tales of seers affright; these with their threatenings of eternal woes sink life in misery, because men know not the truth about the soul and the hereafter. 102–126.

102. Tutemet: i.e. Memmius. The emphatic particle *met* was not attached directly to *tu*, but only to the already strengthened form



tute, giving either *tutemet* or *tutimet*, — both, however, rare. — **vatum**: Munro's explanation of the word is the best. According to him *vates* was "the oldest name for poets," which later "fell into complete contempt, and was discarded for *poeta*. Virgil and succeeding writers made *vates* once more a name of honor, and denoted by it an inspired bard, — something higher than *poeta*. With Lucr. here and in 109 it is a term of contempt, to denote apparently singers of old prophecies and denouncers of coming ills." 103. **terriloquis**: found only here; see n. on 1, 275 *silvifragis*. — **desciscere** etc.: this and the preceding line probably do not imply any distrust of Memmius' courage on the part of the poet, but through him are intended to reach and with the following lines remove the natural timidity of many readers. Memmius, however, as already remarked, seems not to have been inclined toward Epicureanism. 105. **somnia** etc.: cf. the words of the Epicurean in Cic. N. D. 1, 16, 42 *exposui fere non philosophorum iudicia, sed delirantium s o m n i a. Nec enim multo absurdiora sunt ea, quae poetarum vocibus fusa ipsa suavitate nocuerunt*, etc. Cf. also Pers Sat. 3, 83. 106. **timore**: cf. 3, 37 and n. 107. **finem**: always fem. in Lucr. 109. **religionibus**: i.e. the religious fears inspired by the seers. 110. **ratio**: 'way.' — **restandi**: = *resistendi*. 111. **poenas**: acc. after the neuter of the gerundive with *est*. This constr. is very rare except in Lucr. and Varro; it resembles the use of the acc. after verbal nouns in *tio*, common in Plautus. Roby, 'Gr.' Vol. II. Pref. p. lxxii. *et seq.* gives full list of examples. See also Kühner, 'Ausführ. Gram. d. Lat. Sprache,' § 130, 1, *b* (ii. 543); A. 294, *c*; H. 371, I. 2, 2), n. Cf. 1, 138; 1, 381; 2, 492; 2, 1129; 3, 391; 4, 777; 5, 43; 6, 917. 112. **ignoratur**: in making ignorance the cause of unhappiness Lucr. was in sympathy with the general spirit of ancient philosophy. After the time of Socrates most of the schools, whatever their other differences, based virtue on rational action, and in consequence held also that only the wise could be really happy. — **natura animai**: this forms the subject of book third. See n. to 3, 161. 113. **nata sit**: i.e. formed along with the body and born with it, the Epicurean view. — **an**: on the omission of *utrum* see A. 211, *g*; H. 353, 2. — **nascentibus**: supply *hominibus*. — **insinuetur**: *insinuare* 'to steal into,' 'force one's way into,' is a favorite word of Lucr. It is used by him with dat., or with *se* and acc. with *per* or *in*, acc. with *per* or *in* without other acc., or with simple acc. as 116 below; 4, 1030; 5, 73. The belief that souls find their way into human bodies at birth belongs to the doc-

trine of pre-existence and transmigration taught by the Pythagoreans, Plato, and others. Cf. 3, 670 *et seq.* and nn. **114.** This line is to be taken in connection with *nata sit* as embodying the poet's view. The arguments against the immortality of the soul are given at length 3, 417–829. **115.** I.e. whether the soul spends eternity in Hades. **116. pecudes alias:** i.e. animals as well as men; see n. to 3, 611. This line and 113 were perhaps suggested by the verses of Ennius (preserved by Varro, L. L. 5, 59; Vahlen's edit. Ann. 10–13):—

> ova parire solet genus pinnis condecoratum
> non animam; et post inde venit divinitus pullis
> ipsa anima.

For the thought of 116 cf. Tennyson, 'Two Voices':—

> "It may be that no life is found,
> Which only to one engine bound
> Falls off, but cycles always round."

117. Ennius: Q. Ennius (b. 239 B.C. at Rudiae in Calabria, d. 169) was "in letters what Scipio was in action, the most vital representative of his epoch. It was to him, not to Naevius or Plautus, that the Romans looked as the father of their literature." Of his writings only fragments remain. The most important was the *Annales*, the first great Latin epic in hexameter verse, celebrating the achievements of the Roman people from Aeneas down to the poet's own time. Lucr. looked to Ennius as his master in verse, and shows in many passages traces of his influence. Vergil likewise and others found in Ennius, if not a model, at least a poet of whom many verses could be with fitness transferred and imitated. Ennius was a Pythagorean. He boasted, it is said, that the soul of Homer, having passed through many bodies, among which in particular was that of a peacock, had come into his own. With this in mind Horace calls him *alter Homerus*, though there is reference also to the Homeric flow of his epic verse; see Hor. Ep. 2, 1, 50 and Macleane's note. In the Pythagorean view of metempsychosis the passing of souls through the bodies of fowls for some reason held a very important place,—a belief finely satirized by Lucian in the 'Cock.' The best account of Ennius is in Prof. Sellar's 'Roman Poets of the Republic,' ch. 4. **118. Helicone:** the favorite home of the muses. See n. on 3, 1037 *Heliconiadum*. Ennius was the first to introduce the Greek verse-forms and



principles of composition to the Romans. **119. clueret**: *cluēre* is a defective verb, having no perfect stem. It is a favorite word of Lucr., but it is not found in Cic. nor the Augustan writers except in quotations from the earlier period. The root-meaning (cf. Gk. κλύειν Lat. (*c*)*lau-s*) is often obscure, and *cluēre*, as here, almost = *esse*. See Neue, 'Formenlehre,' ii. 426. **120. etsi**: = καίτοι, 'and yet,' slightly corrective of the preceding statement, — a use not uncommon in both prose and verse. So in prose *quamquam* is often used, especially by Cic. — **esse**: = *existere*. — **Acherusia** etc.: the poet had in mind a passage from Ennius' tragedy 'Andomache,' part of which is preserved by Varro (L. L. 7, 6 Müller; see Vahlen's Enn. p. 102): —

> 'Acherunsia témpla alta Orci, sáncta, salvete, ínfera,
> pállida leti, obnúbila tenebris átris, aeternis loca.

— **templa**: in the earlier writers, particularly Ennius, and after him Lucr., whom in this usage Manilius imitates, *templum* often has the derivative meaning of a 'space marked off' (root *tem*, cf. τέμ-νω). Varro (L. L. 7, 6) remarks that it may be applied to places in the heavens or on the earth or under the earth. This signification of *templa* was especially common in the language of augury, referring either to the divisions of the sky or to places chosen for observation; for the latter use cf. Liv. 1, 6. Trans. by 'places,' 'regions,' 'quarters,' according to the connection. **122.** 'though in our passage thither neither our souls nor bodies hold together.' **123. simulacra**: exactly what these 'images' or 'idols' were supposed to be it is difficult to say. They seem to have been conceived of as intangible, immaterial forms, just like the body in appearance, which went to Hades while the soul departed elsewhere. According to the implied meaning of the present passage the *simulacra* were in the lower world, while the soul passed on through living bodies. For Ennius supposed Homer's soul was in himself, but speaks of the 'image' (*speciem*) as appearing to him. A like separation of soul and image is perhaps implied in Verg. Aen. 4, 385, where in substance Dido says that when death shall have severed soul and body, as a shade (*umbra*) she will be present in all places, while report of Aeneas' sufferings will come to her to the lowest parts of Hades (*ad imos manes*); but see Conington's nn. Edd. quote here Serv. ad Aen. 4, 654 *deprehendunt esse quod simulacrum, quod ad nostri corporis effigiem fictum, inferas petit; et est species corporea, quae non potest tangi, sicut ventus.* This line is imitated by



Vergil. **124. unde**: = *e quibus locis.* — **semper florentis**: properly a compound like 'ever-blooming.' — **Homeri**: see n. on 3, 1037. Ennius' account of this vision was at the opening of the *Annales;* cf. Ann. 6 . . . *visus Homerus adesse poeta.* **125. lacrimas**: cf. Aen. 2, 271. Hades was represented as a place of deepest gloom; the shades often wept at the sight of those from the bright upper air. Cf. the touching scene in Hom. Od. 11, 1545 *et seq.*, where Ulysses greets the shade of his mother; Verg. Aen. 6, 295 *et seq.;* also Tib. 1, 10, 35: —

> Non seges est infra, non vinea culta, sed audax
> Cerberus et Stygiae navita turpis aquae;
> Illic perscissisque genis ustoque capillo
> Errat ad obscuros pallida turba lacus.

There was a legend that Pythagoras, in a visit to the Lower World, found Homer and Hesiod in torment on account of their sayings about the gods. — **salsas**: "the tears were doubtless in regret for life," says Munro. **126.** Ennius' instructor was his master-poet, Homer. So Dante makes Vergil his guide and teacher.

The Subject, — The World, the Soul.

The poet tells how he must disclose the truth about things above, about the mind and soul; whence too those visions come that in sleep or sickness weigh men down with dread. 127–135.

127. cum: correlative with 130 *tum.* — **sup. de rebus**: cf. 54; 5, 1188–1193 & nn. **129. quaeque**: the pl. of *quisque* is often met with in Lucr., sometimes with a substantive, often in the neuter alone, as here. Here *quaeque* almost = *omnes res;* trans. 'things severally.' **130. cum primis** = *imprimis.* — **sagaci**: Lucr. is fond of this word. The literal meaning 'keen of scent,' used of hunting-dogs, makes it an appropriate term for the tracking out of knowledge. **131. unde**: i.e. *e quibus rebus, elementis.* **132.** Order of trans. *et quae res, nobis adfectis morbo, obvia (nobis) vigilantibus, et (nobis) sepultis somno, terrificet mentes.* **134–5.** Cf. 4, 734; 4, 757 *et seq.;* 5, 1169–1178 and nn. Macrobius (Sat. 6, 1, 48) compares Verg. Aen. 1, 354 *et patris Anchisae gremio amplectitur ossa.*

Hard is the task; but led on by sweet friendship's joy and hope he will press on to unfold his theme. 136–145.

136. animi: gen. after *fallit.* This constr. is found with several verbs; cf. Plaut. Mil. 1068 *quid illam miseram a n i m i e x c r u c i a s?* **Cael.**



ap. Cic. Fam. 8, 5 *ego quidem vehementer a n i m i p e n d e o.* It seems to be a survival from the locative case, like *belli, domi.* See Roby, 1168, 1321. Once at least, however, *fallere* appears to be accompanied by a gen. of separation after the Greek constr., Plaut. Ep. 2, 2, 57 *nec sat exaudibam, nec s e r m o n i s f a l l e b a r tamen.* See Kühner, 'Ausführ. Gram.' ii. 347. Trans. *an. fall.* 'nor does it escape my mind.' — **obscura**: Lucr. uses this word but once in its literal sense, 4, 431, *obscurum . . . cacumen.* Cf. 1, 922; 1, 933; 4, 8; especially 1, 639 and n. — **reperta**: 'discoveries,' rarely found outside of Lucr. **137–9.** The difficulties Lucr. had to contend with were doubtless great. His predecessors in philosophy had written in a barbarous style (Cic. Acad. 1, 2, 5; Fin. 3, 12, 40; Tusc. Disp. 2, 3, 7; 3, 15, 33; 4, 3, 6–7), and the Latin in his time had properly speaking no philosophical vocabulary. To the fact that he had to coin or use in new sense many terms was added the difficulty of expressing philosophic thoughts in verse. His skill in surmounting both obstacles is attested by every page of the poem. Cicero also complains of the poverty of the Latin tongue; see N. D. 1, 4, 8 *complures enim Graecis institutionibus eruditi ea, quae didicerant, cum civibus suis communicare non poterant, quod illa, quae a Graecis accepissent, Latine dici posse diffiderent;* also Tusc. Disp. 2, 15, 35. But when his patriotism gets the better of him he does not hesitate to affirm the contrary; see De Fin. 1, 3, 10 *Latinam linguam non modo non inopem, ut vulgo putarent, sed locupletiorem etiam esse quam Graecam;* cf. also id. 3, 2, 5. Cf. p. l. **138. multa**: see n. on 111 *poenas.* **141. amicitiae**: the use of this and similar expressions regarding the relation between Lucr. and Memmius is thought to give a clue to the poet's social position. See p. x. **143. demum**: with *possim.* **145. penitus**: with *convisere,* not *occultas;* trans. 'entirely,' 'thoroughly,' as generally in Lucr.

i. FUNDAMENTAL PRINCIPLES.

1. From nothing nothing is produced. 146–214.

This dread and darkness of the mind must be dispelled by knowledge of nature and her laws; of which the first principle is, that nought from nothing ever comes by divine power. 146–158.

146–8. These lines several times occur, keeping always prominent the thought that physical knowledge has no end in itself, but is simply

a means of securing peace of mind. Upon this ethical purpose of all science the Epicureans laid great stress. See Zeller, 'Stoics, Epicureans, and Sceptics,' ch. 17. **146. animi**: the gen. would naturally come either before *terrorem* or after *tenebras*. G. 682; H. 564, I. II. A word standing in the same relation to two others, however, is often placed between them, — a usage by the old grammarians called *coniunctio*. See Cornificius ad Herennium 4, 38 *coniunctio est cum interpositione verbi et superiores orationis partes comprehenduntur et inferiores, hoc modo: Formae dignitas aut morbo deflorescit aut vetustate.* This arrangement of words is especially common in Cicero. Cf. Cic. De Am. 2, 8 *cum summi viri tum amicissimi* and Reid's note. **148. species ratioque**: 'aspect and law,' well distinguished by Munro as "the outward form and aspect" and "the inner law and principle after which nature develops herself." See n. to 586. **149.** 'The warp of whose design we shall begin with this first principle'; cf. 418; 6, 42; *cuius* is scanned as a monosyllable.

150. So Democritus taught; see Diog. Laert. 9, 44 Δοκεῖ δὲ . . . μηδέν τε ἐκ τοῦ μὴ ὄντος γίνεσθαι; and Epicurus in his letter to Herodotus says (id. 10, 24, 38) πρῶτον μὲν ὅτι οὐδὲν γίνεται ἐκ τοῦ μὴ ὄντος. That nothing can be produced from nothing was a doctrine common to all the ancient physicists as well as to modern materialists. Who first definitely formulated it is not known; before the time of Aristotle it seems to have become current as a physical axiom. This line of Lucr. has been interpreted to mean that nothing can happen without adequate cause (see Tait and Stewart, 'The Unseen Universe,' p. 132), — a teaching that held a prominent place in the Stoic philosophy; but a comparison with the statement of Epicurus, whom Lucr. so closely followed, shows clearly that the reference is to the coming of the existent out of the non-existent. Cf. Haeckel, 'Nat. Hist. of Creation,' ch. 1: "Never yet has an instance been observed of even the smallest particle of matter having vanished, or even of an atom being added to the already existing mass." Practically, indeed, in the hands of the experimenter matter is indestructible, and is hence inferred to be without beginning; but the modern materialists are as a rule less dogmatic regarding its eternal existence than the ancient. See Haeckel, *ut sup.*; Herbert Spencer, 'First Principles,' Part 2, ch. 4. The denial that by any agency matter can come into existence from nothing involves necessarily its eternal pre-existence; and this violates the law of causality. For matter, in the ordinary acceptation of



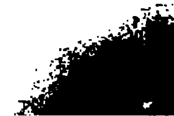
the term, whether conceived of as divisible into atoms or as a homogeneous mass, has in itself no creative principle. It is, therefore, a product, and as such must have had a cause, a creator. The very fact of its divisibility, and the adaptation of the smallest portions to one another, shown in the law of multiple proportions in chemistry, point to a creative and intelligent cause. The atoms bear "all the characteristics of manufactured articles." See Wainwright, 'Scientific Sophisms,' chs. 8 and 10; Flint, 'Anti-Theistic Theories,' p. 61; Bowne, 'The Philosophy of Herbert Spencer,' ch. 3; Lewis, 'Plato against the Atheists,' Diss. L. pp. 272-285; Büchmann, 'Beflügelte Worte;' Baxter, 'An Enquiry into the Nature of the Human Soul,' vol. ii.; but especially Stallo, 'Concepts and Theories of Modern Physics.' The fullest discussion is in Cudworth, 'Intellectual System of the Universe,' chap. 1 and chap. 5, with Mosheim's able dissertation given in Harrison's edit. vol. iii. **150. divinitus**: not essential to the maxim; the poet takes every opportunity to impress the disregard of the gods found in his system. **151. ita**: looks forward to the *quod*-clause, 'under these conditions,' almost 'for this reason.' **153. operum**: attracted into the relative clause from its natural constr., *multa opera fieri*. A. 200, *b*; G. 618; H. 445, 9. For the thought cf. 5, 1183 *et seq.* and nn. **155. nil**: Lucr. has *nil* and the forms from *nilum* as suits the metre; also *nec hilum*; cf. 3, 220 and n. The old editions have *nihil* and *nihilum*; but Lachmann has clearly shown (n. to 1, 159) that Lucr. used the contracted form. **157. unde**: as in 131, where see n. **158.** The position of Lucr. is exactly that of Büchner: "That the world is not governed, as is frequently expressed, but that the changes of matter obey a necessity in it which admits of no exception, cannot be denied by any person who is but superficially acquainted with the natural sciences." 'Force and Matter,' trans. p. 5. No ancient materialist ever surpassed this in positiveness of assertion! — **quaeque**: 'severally'; see n to 129. — **sine**: postpositive, as often in poetry.

The poet proceeds to give six proofs, or more properly applications, of the principle laid down.

(1) *If things were produced from nothing, there would be no need of seed, nor certainty in products.* 159–173.

159. fierent: supply *res* from following *rebus*. — **omnibu'**: The early poets in their scansion often took no account of the final *s*.

It was often omitted also in the older inscriptions, as those of the Scipios. At that time to glide over the final *s* in speaking was regarded as a mark of refinement, — as, indeed, it seems to be considered by some to-day; but when Cicero wrote it was already in bad taste. Cf. Cic. Orator 161 *quin etiam, quod iam subrusticum videtur, olim autem politius, eorum verborum, quorum eaedem erant postremae duae litterae, quae sunt in 'optim u s', postremam litteram detrahebant, nisi vocalis insequebatur.* The tendency of the language, however, was fixed, and *s* final with other final consonants has entirely disappeared in Italian. A. 375, *a;* G. 722; H. 608, I. n. 3. **160. genus**: supply *rerum.* The limiting genitive with *genus* is often omitted; cf. 2, 447; 3, 483. The argument here is precisely that of Epicurus: 'First, indeed, (we are to admit) that nothing is produced from the non-existent; for (if it could be) everything would be produced from everything; of seeds, at least, nothing would have need.' See Diog. Laert. 10, 24, 38. **161. mare**: the abl. ends regularly in *i*, as 6, 890; *mare* is occasionally found in other writers. See Roby, 'Gr.' 429. Neue gives full list of examples, 'Formenlehre,' 1. 229–230. **162. squamigerum**: gen. pl.; cf. 2, 1083 and n. on 1 *divom.* This word is first met with in Cicero's translation of the 'Phaenomena' of Aratus, 328 (574) *exin squamigeri serpentes ludere pisces,* whence the poet likely drew it; for he seems to have studied with admiration this youthful work of Cicero's, and in many instances to have been indebted to it. **163. armenta**: *armenta* and *pecudes* are both tame animals as opposed to *genus ferarum;* the former word refers to the larger sort, especially plough-oxen and horses; the latter to the smaller, as the lesser cattle, sheep, goats etc. See Döderlein, 'Lat. Synonyms.' **164. tenerent**: like *posset* above and the following subjunctives, a verb of an apodosis whose protasis is to be supplied from 159. **166. ferre** etc.: *omnes arbores omnis fructus* (i.e. *omnia fructuum genera*) *ferre possent.* **167. ubi**: almost = *si;* so also *cum* is sometimes used to introduce a conditional clause. — **genitalia corpora**: see n. to 55 *primordia.* **168. qui**: old abl. with the force of an adv.: 'how could things have a fixed, unvarying mother?' **169. at nunc**: 'but as it is.' *At* is often used to introduce an objection to a preceding statement, sometimes correcting the false with the true as here, sometimes bringing forward a conflicting statement that is to be met, as 803, where see n. — **seminibus**: Lucr. uses *creare* with *de* and abl., *ex* and abl., or simple abl. Cf. 155, 646. **170. inde**: with *ubi* = *ex eo . . . in*



quo. — **exit**: supply *quicque* from *cuiusque* in 171; see **n.** to 15 *capta.* 171. **corpora prima**: see n. on 1, 55 *primordia.* 173. **certis**: 'particular.'

(2) *That things do not rise from nothing is evident from the fixed seasons in which all products mature.* 174–183.

174. **calore** = *aestate;* so *frigus* is sometimes used for *hiemps*, as Verg. Ecl. 5, 70 *ante focum si frigus erit.* Thus in Greek θάλπος is found for θέρος, ψῦχος for χειμών. 175. **fundi**: see n. to 351. 178. **tempestates**: here = ὧραι, 'the due seasons.' *Tempestas* in the singular refers to unseasonable as well as seasonable, bad as well as good, weather; the meaning must be determined from the context, as in the case of *valetudo*, which means good health or bad health according to the connection. Cf. on the one hand 2, 32 *cum tempestas adridet;* 4, 169; 5, 1395; on the other 1, 761 *tempestate coacta;* 6, 376; 6, 458. 180. **exorerentur**: as in 5 *exortum*, where see n. 181. **spatio**: i.e. *tempore.* — **alienis part.**: 'the wrong seasons.' 183. **concilio**: 'union'; abl. of separation, while *tempore* is an abl. of means. 184. **porro**: 'again.'

(3) *If things could come from nothing, living things would spring at once to maturity, would need no time for growth.* 184–191.

186. **infantibu'**: see n. on 159 *omnibu'*. 187. **arbusta**: for *arbores*, as often in the poets; *ărbŏrēs* cannot stand in hexameter verse; see 352 and n. 189–190. The text is here corrupt and difficult. Lachmann reads . . . *ut par est semine certo crescere, resque genus servant;* which gives a grammatical though inelegant constr. Munro supposes that after *est* words have dropped out, which he supplies, so that the lines read: —

> paulatim crescunt, ut par est, tempore certo,
> res quoniam crescunt omnes de semine certo
> crescentesque genus servant; ut noscere possis

in which, while the MSS. reading is preserved, there is both good sense and good constr. Munro supposes a break in the text to have arisen from the concurrence of two lines having similar endings. 189. **ut par est**: 'as is natural.' 191. **sua de materia**: the meaning is not that there are different kinds of matter, but that in the case of every living thing there are shapes and groups of atoms adapted to



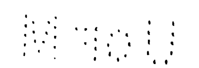
nourish it. The effects of different kinds of food are discussed 4, 633 *et seq.*

(4) *There would be no need of rain for plants nor food for animals.* 192–198.

192. **certis imbribus**: 'fixed seasons of rain.' 193. **submittere**: 'put forth'; a favorite word of our poet in this connection. Cf. 1, 8. 194. **secreta cibo**: *secernere* is often followed by the abl. with *a, ab;* sometimes by the abl. with *ex;* rarely and only in poetry by the simple abl. as here and in Hor. Od. 1, 1, 32 *secernunt populo.* Lucr. has the gen. of separation in 2, 843 *secreta teporis* etc. For the thought cf. 1, 1038. 197. **ut . . . videmus**: i.e. *ut multis verbis multa elementa communia esse videmus.* See n. to 823–6. 198. **principiis**: for *primordiis;* see n. to 55.

(5) *There would be no fixed size for things; men would be giants.* 199–207.

199. **denique**: 'again.' This word is used by Lucr. for the most part not to introduce the last argument of a series, or a generalization, but simply to present a new point. This use is more akin to the original force of *denique,* which at first referred merely to succession in time; the meaning 'finally' is more common in prose, and is not unknown to our poet; see e.g. 1, 17. 200. **qui** = *ut ei.* — **per vada**: the implication is that the deep sea would be to them but a ford. The poet had in mind some monster like Polyphemus, so graphically described by Vergil as wading out into the middle of the sea, 'and yet the billows did not touch his lofty sides.' See Aen. 3, 664–5. 201. **manibus**, etc.: like the giants who of old in the war with the gods were said to have piled Ossa on Pelion in the attempt to scale Olympus. 202. **saecla**: i.e. *saecla hominum,* in the sense of 'generations.' 204. **gignundis**: see n. on 59 *reddunda.* 206. **quo**: see n. on 169 *seminibus.* — **quaeque**: supply *res.* 207. **proferrier**: archaic for *proferri.* The longer form is frequently met with in inscriptions and in Prae-Augustan poetry, sometimes even in the later poets.



(6) *The spontaneous products of the earth would far surpass those cherished by human toil.* 208–214.

208. postremo: notice with what skill the poet varies the words introducing the various points, so that a formal enumeration is preserved without marring the poetic effect; 174 *praeterea*, 184 *nec porro*, 192 *huc*, 199 *denique*, 208 *postremo*. **209. manibus**: not dat., but abl. of means or instrument. **210. esse** etc.: supply *fatendum est*. **213. quaeque**: see n. to 129.

2. To nothing nought returns. 215–264.

215. corpora: for *corpora prima*. — **dissoluat**: generally after *q*, *g*, *s*, *l*, and *r* the semi-vowel *v* has the force of a consonant. But in *soluere* and compounds, and a few other words, it is often treated by the poets as a vowel. Thus here *dīssŏlŭăt*. For other exceptions cf. nn. to 560 *reliciüo*; 5, 679 *conseqüe*. *Suemus* (1, 60; 1, 301 and often) is sometimes pronounced as a dissyllable, sometimes as a trisyllable. See Roby, 94, 2. **216. interemat**: this spelling, for the classical period, rests on better MSS. authority than *interimat*, though Brambach ('Latin Orthography' Trans., p. 97) and the Latin dictionaries prefer the latter. So we should write *neglego*, *intellego*, *peremo*. See Munro, 'Lucr.,' p. 33. Cf. Festus, p. 217, Müll. With the thought cf. the teaching of Democritus given in Diog. Laert., 9, 44, 'and not anything is destroyed into the non-existent.' For the modern view of the indestructibility of matter see nn. to 150, 483.

(1) *If things could be resolved into nothing, they might without force suddenly disappear from sight and perish utterly.* 217–224.

217–8. Cf. the argument of Epicurus: 'And if that which disappears were destroyed into the non-existent, all things would perish utterly, since there would not be things into which they could be resolved' (Diog. Laert., 10, 24, 39 *καὶ εἰ ἐφθείρετο δὲ τὸ ἀφανιζόμενον εἰς τὸ μὴ ὄν, πάντα ἂν ἀπολώλει τὰ πράγματα, οὐκ ὄντων τῶν εἰς ἃ διελύετο*). Cf. also Cudworth, 'Intellectual System,' ch. 1, § 28. **221. quod nunc** 'whereas in truth,' forms a transition from the false to the true view, like 169 *at nunc*. See n. on 82 *quod contra*. **222. donec**: with the indic., as generally in Lucr. — **ictu**: see n. on

528 *plagis*. **223. inania**: = *inania loca*. All things were supposed to contain void, as only the atoms were thought to be perfectly solid. See 483 *et seq*. **224. nullius**: i.e. *nullius rei*. — **videri**: Munro notes that *videri* here has the force of *esse*, as in Greek φαίνεσθαι is often used for εἶναι.

(2) *Infinite past time must have reduced all things to nought.* 225-237.

228. redducit: in texts of classical writers generally written *reducit*. But *red* was the primitive form of the particle *re*, in its origin an abl. case; so in early Latin compounds either have the full form *red*, or lengthen the vowel to compensate for the loss of *d*; thus *redducere*, *reccidere* (always in Lucr.) or *rēducere*, *rēcidere*. Later the *d* was dropped without compensation. See Roby 160, 6 and 7. **230. mare**: obj. of *suppeditant*, which is here used transitively. — **ingenuei**: *-ei* is an old ending of the nom. pl. of *o*-stems, common during the second century B. C., and occurring occasionally till the Augustan age. Munro takes *ingenuei* as opposed to *externa* = 'its own native . . . from without.' **231. unde aeth. sid. pas.**: suggestive of Verg. Aen. 1, 608 *polus dum sidera pascit*. Cf. 1034; see 5, 523-5 and n. **232. debet**: for *necesse est*, to indicate a necessary result or consequence; trans. 'must.' Often thus in Lucr.; cf. 2, 1120; 3, 187 etc. **233. consumpse**: archaic, = *consumpsisse*; both forms were originally sigmatic aorists, ending *-se*. In the older poets the shorter form is not uncommon with stems ending in *s*, *ss* or *x*; it is occasionally met with in the later writers. Cf. 3, 650 *abstraxe*; 5, 1159 *protraxe*; Hor. Sat. 1, 9, 73. For other examples see Neue, 'Formenlehre,' ii. 535-8. — **anteacta**: pronounced as a trisyllable, *antēacta*; the parts are written separately 2, 298. Lucr. is fond of this word. — **dies**: 'time,' 'lapse of days.' Cf. 322, 557. **234. fuere**: supply *res* or *elementa*. **235. haec rerum . . . summa**: i.e. the world, as distinguished from *summa rerum*, the universe. **236. certe**: emphatic by position, 'beyond doubt.' **237.** The form of the reasoning is worthy of note. An inference of fact introduced by *igitur* follows a conditional sentence. Some modern materialists build gigantic fabrics of certain knowledge upon an IF.

(3) *The same cause would avail to destroy all things.* 238-249.

238. denique: as in 199. — **volgo**: 'without distinction.' **240. minus aut magis**: the Latin more often has *magis aut minus* or

magis minusve or *magis ac minus*, like the English 'more or less.' It seems more natural to think of the greater first. — **indupedita**: for the form see n. to 82 *indugredi*. Construe with *materies*; the thought is that matter, being imperishable, and in itself 'linked together in mutual entanglement,' keeps things in existence against destructive agencies. **241. leti**: depends on *causa*. **242. quippe**: here a conj. 'since,' 'inasmuch as.' — **ubi . . . quorum**: i.e., *in quibus . . . eorum*. — **nulla**: *nulla elementa*. **244. at nunc**: see n. to 169. **nexus**: the different kinds of *nexus* and their significance are explained 814–829; 2, 581 *et seq.*; 2, 700 *et seq.* **245. constant**: = *sunt*, a common use in Lucr. — **aeterna**, etc.: arguments for the eternity of matter are given 483–634. **249. corp. mat.**: see n. on 1, 55 *primordia*.

(4) *When things perish they only change form by the first elements entering into new combinations.* 250–264.

250. pater aether: the notion of the sky as father of all goes back to the primitive religion of the Indo-European folk. They saw in the bright open heaven the symbol both of power and of infinity. With childlike simplicity they turned to it with worship as the giver of light and life, the visible manifestation of that unseen power that moved throughout all nature; for the unreflecting mind of both child and savage associates all movement with a will. The sky soon became more than a symbol; it seemed itself a personality, a veritable god, that ruled the on-going of the seasons, the sweep of tempests or the coming of the rain and sunshine; whose favor might be won or anger averted by men's actions. Hindoos, Greeks and Romans alike shared as common heritage the worship of the Sky-Father as chief of all the deities. For the Vedic Dyaushpitâ, the Greek **Ζεὺς πατήρ**, and the Latin Juppiter are essentially the same being; the three names have a common origin in *div* or *dyu* 'to shine,' and *patar* 'father.' In Greek as well as Latin the so-called impersonal verbs referring to the weather once had as subjects **Ζεύς** and Juppiter, implying the direct agency of the deity in all the processes of nature. Corresponding to the conception of the heaven as father arose that of earth as mother. For does she not receive into her bosom the dew, the sunlight and the shower? and does she not supply to life kindled from the sky all forms of nourishment? So the early beliefs of Greece and Rome were permeated with the thought of sky and

earth as the parents of all; when now the old religions became a thing of the past, abandoned as superstitions by the higher classes of society to the ignorant and credulous, the forms of worship were still kept up. Many, indeed, particularly the Stoics, tried by rationalistic explanations to adapt the old myths about gods and heroes to their philosophic views. Cf. e.g. 2, 652–660. But they were inwrought into the folk-life of both Greece and Rome. Attempts to explain them to accord with natural law were never popular. Finally, discarded as beliefs they remained as poetry. To Ennius, Lucretius, to Catullus, Vergil and Horace, gods and goddesses were but stuff for poetry,—conceptions about which were gathered associations bright and beautiful, or sad and stern, traditions of power and passion that gave scope for all sorts of poetic license. But in this and like passages the personification of sky and earth doubtless meant far more to Lucr. than to most of his contemporaries, on account of its philosophical significance. Under the beauty of description lies a deep and wide-reaching truth. Cf. n. on 2 *Venus*. **251. matris terrai**. Cf. 2, 589–660; 5, 821; Vergil has imitated this passage, Georg. 2, 325–7:

> Tum pater omnipotens fecundis imbribus aether
> Coniugis in gremium laetae descendit, et omnis
> Magnus alit, magno commixtus corpore, fetus.

253. ipsae: supply *arbores*. Cf. 352 *totas* and n. **255. pueris**: 'children.' *Florere*, meaning 'to abound with,' is followed by the ordinary constr. with verbs of plenty. Cf. 5, 1442. **257. pingui**: substantive in the abl., limiting *fessae*. **260. artubus**: Lucr. has *artibus* but once, 5, 1077. **261. mentes**: for *corda* or *pectora*. Cf. 1, 13. **262. penitus**: see n. to 145. **videntur**: supply *perire*. **263. alid**: a collateral form of *aliud*, like *alis* for *alius*, *ali* for *alii*. See Roby, 373; Neue, 'Formenlehre,' ii. 214. In the time of Lucr. these forms were already archaic. See Draeger, 'Hist. Syntax d. Lat. Sprache,' Einl. p. xii. **264. morte . . . aliena**: i.e. *alterius rei interitu*, as Lambinus explains. That the death of one thing is the birth of another was a maxim of the ancient physicists. Munro quotes one form of it in Greek from Arist. Met., 2, 2, p. 994, b, 5 *ἡ θατέρου φθορὰ θατέρου ἐστὶ γένεσις*. Of the doctrine itself he well remarks that "as here applied to this world of ours, it is perhaps hardly consistent with what is said below 556, that the process of destruction is much quicker than that of construction. Elsewhere Lucr. argues at great length and with much earnestness that this

world is of quite recent formation, and again that it not only can but must and will be destroyed in a moment of time. What then becomes of this unvarying equality, at least thus unconditionally applied, *nec ullam rem gigni* etc.?" In the doctrine here stated by Lucr. seems to lie an anticipation by the ancient philosophers of the modern doctrine of the conservation of force.

ii. Elemental Parts of the Universe, Matter and Void.

1. Matter exists, composed of Invisible Particles, the Atoms. 265–328.

This is shown by a number of illustrations, drawn from the wind (271–297); *smells, heat, cold and sounds* (298–304); *the moisture that collects in garments spread out near the sea* (305–310); *the imperceptible wearing away of finger-rings, plough-shares, pavements, statues near the city gates* (311–321); *the unseen processes of growth and decay* (322–328).

265. Nunc age: 'now heed,' a common expression in Lucr., marking a transition to a new topic. **267. nequa**: often written *ne qua*. **269. tute**: emphatic for *tu*. Cf. 102 *tutemet* and n. **270. confiteare**: *necessest confiteare* is a formula frequently met with in Lucr. For constr. see A. 331, *f*, Rem.; H. 502, 1. *Necessest* is also followed by the infin., as 302.—**esse** = *existere*, as often.—**videri**: passive. **271. portus**: for *cortus* of MSS. Lachmann has *cautes*. Munro defends the reading *portus* on the ground that "the wind beats against them (the harbors), and prevents all ingress to ships; rendering them, therefore, more dangerous than the open sea." **272. ruit**: *ruere* in Lucr. is several times transitive, a use rare except in poetry. Cf. 1, 289 and 292; 5, 1325; 6, 726. **275. silvifragis**: found only here. Lucr. displayed boldness and power in the formation of new compounds. Some of them became fixed in Latin speech. Among the new words may be mentioned *terriloquis* (1, 103); *fluctifrago* (1, 305); *rarefieri* (1, 648); *auctifici* (2, 571); *pennipotentum* (2, 878; 5, 789); *primigenum* (2, 1106); *sensiferos* (3, 240); *cinefactum* (3, 906); *tripectora* (5, 28); *levisomna* (5, 864); *frugiparos* (6, 1); *confervefacit* (6, 353); *vacefit* (6, 1005; 6, 1017); *patefiet* (6, 1001). **277. caeca**: 'hidden,' 'invisible.' **278**: see n. on 6 *caeli* etc. **281. et**: used as a particle of comparison, 'than'; cf. 2, 416. In this sense *ac* (*atque*)

is more common. — **aquae . . . natura**: = *aqua*. Lucr. is fond of such expressions. Cf. 2, 818 *natura coloris*; 3, 191 *natura mellis* and the like. **287. molibus**: i.e. *pontis*, 'the piers.' **289. grandia saxa**: explained by Munro as the stones of the bridge swept along by the current. — **ruit** etc.: 'it dashes to destruction everything that anywhere hinders its waves.' For *quicquid* see n. to 3, 787. **290. debent**: 'must;' see n. to 232. **295. etiam atque etiam**: often used by Lucr. in an emphatic restatement of his point at the close of an argument or illustration. **297. aperto**: see n. on 915 *apertis*. **299. venientis**: the participle is much more vivid here than the infinitive would be. A. 292, *e*; G. 536; H. 535, I. 4. **301. usurpare**: as in 4, 975 *ea sensibus usurpare* 'to perceive'; a prae-Augustan use. — **suemus**: here a dissyllable. See n. to 1, 60. **304**: Cf. Sen. Ep. Mor. 106, 8 *numquid est dubium, an id, quo quid tangi potest, corpus sit?* **305. fluctifrago**: found only here. **306. eaedem**: scanned *eaedem*. — **serescunt**: found only here; derived, not from *serenus*, as is sometimes stated, but from a simple stem, perhaps *sero-*, from which *ser-enus* also comes. See Vaniček, 'Etymol. Wörterbuch,' p. 1223. **307. umor aquai**: cf. also 1, 349 *liquidus umor*; 2, 197 *umor aquae*; 3, 427 *umor aquai*. All these expressions, like *natura aquae* above, are somewhat pleonastic. **311. annis**: the connection suggests the earlier meaning of *annus* 'a circuit.' See Var. L. L. 6, 8 *tempus a bruma ad brumam, dum sol redit, vocatur annus; quod, ut parvi circuli anuli, sic magni dicebantur circites ani, unde annus*. But the poet had in mind the ordinary meaning, or he would hardly have used the word *redeuntibus*. Cf. 5, 644, and n. **312. subter**: i.e. on the inside. — **habendo**: *habere* 'to wear' is not common. Cf. Tib. 4, 2, 14 *Vertumnus Olympo mille habet ornatus, mille decenter habet*; Liv. 1, 11, 8 *Sabini aureas armillas magni ponderis laevo gemmatosque magna specie anulos habuerint*. **313-4.** Cf. 4, 1286-7, also Ov. Ep. ex Pont. 4, 10, 5-6:

> Gutta cavat lapidem, consumitur annulus usu:
> Atteritur pressa vomer aduncus humo;

and Tib. 1, 4, 18 *Longa dies molli saxa peredit aqua*. Cf. also Plut. De Lib. Educ. 4, σταγόνες μὲν γὰρ ὕδατος πέτρας κοιλαίνουσι, and the frag. of Choerilus, πέτρην κοιλαίνει ῥανὶς ὕδατος ἐνδελεχεείῃ. The thought has become trite in the modern literatures. **313. stilicidi**: for the form, see n. to 11 *favoni*. Lachmann has shown that *stilicidum* is the better spelling of the word, though *stillicidium* is generally found in

the MSS. **315. strata viarum**: see n. to 86. The phrase includes not merely the streets of cities, but also the paved highways, as the *Via Appia*. — **propter**: see n. to 90. **317. signa**: statues of the gods were often placed near the city gates to receive the worship of those who entered. See Pausanias 4, 33, § 4. This custom is thought to explain the reference in Acts 14, 13 ὅ τε ἱερεὺς τοῦ Διὸς τοῦ ὄντος πρὸ τῆς πόλεως, ταύρους καὶ στέμματα ἐπὶ τοὺς πυλῶνας ἐνέγκας, σὺν τοῖς ὄχλοις ἤθελεν θύειν. The Greeks appear to have touched or kissed the chin of statues, the Romans the right hand. A parallel to the fact noticed by Lucr. may be seen in many European churches and cathedrals. The right foot of the bronze statue of St. Peter in St. Peter's at Rome is partly worn away by the kisses of devotees. **318. salutantum . . . meantum**: hysteron proteron. For the spelling see n. to 1, 4 *animantum*; *praeterque meantum*, perhaps a tmesis; but see n. to 66 *contra*. **321. speciem**: = *visum*; 'the nature of vision has jealously shut out our seeing.' **322. dies**: as in 233. **326. vesco**: 'corroding.' *Vescus*, connected in derivation with *vescor* (*ve-ed-co*, *ve-es-co*, *vesco-*, Vaniček, 'Etym. Wörtb.' p. 28), has lost the active sense except here and in a very few other passages. See Munro's note. **327. quoque**: *quōque*, as above 320. **328. natura gerit**: see n. to 56. The metaphor here, as Munro remarks, is taken from the government of a state.

2. There is Void, in which Atoms move and are acted on. 329–417.

There is void (329–334). *If there were not, motion would not be possible* (335–345). *Besides, all things are penetrable, admitting other bodies into them or through them* (346–357). *Things of the same size differ in weight* (358–369).

329. stipata: 'packed together'; a common word in Lucr. **330. inane**: a substantive, = τὸ κενόν, which was defined by Arist. (Phys. 4, 1, 6) as τόπος ἐστερημένος σώματος, 'place devoid of body.' For 'void' Lucr. also has *vacuum*, once *vacans* in 444 *inane vacansque*. He uses also *spatium*, *locus*, and the like, but less definitely, to designate the room or space in which things exist. **331. in mul. rebus**: 'in many respects.' **333. summa rerum**: here = the universe. **334.** This line is doubtless spurious. It was first rejected by Bentley. **335. quod esset**: i. e. *inane existeret*. **336. officium**: 'property.' **339. quoniam**: *quŏnĭam* could not begin the line, and hence does not

stand in its regular place as first word of the clause. In prose, however, it often yields its position to an emphatic word. Cf. 345; 4, 933. **340. sublima**: *sublimus* was a rare collateral form of *sublimis.* Lucr. does not use the latter. On the other hand, *sublime* is the common form of the adv., and *sublimiter* is rare. With the threefold division of the world cf. 278. **341. multa modis multis**: Lucr. is fond of this expression, the alliteration and paronomasia of which seem to have struck his fancy. The Latins in general showed a fondness for placing near together words that sounded alike. Cf. A. 344, *g;* G. 683; H. 563. **343. non . . . priv. carer. etc.**: i.e. on the principle that a thing cannot be said to be deprived of that which it never possessed. — **sollicito**: with the derivational meaning (*sollus,* cognate with ὅλος, w h o l e, and *citus* part. of *ciere*) 'wholly in motion,' 'restless.' So 3, 732; 6, 1038 and 1185. **346. solidae**: *solidus,* Munro observes, is the technical term of our poet for what is "perfectly solid and impenetrable, that is, his first-beginnings; in this sense no *res* can be *solida.*" See n. to 223. **347. cum**: hardly necessary here, as the simple abl. of characteristic would have fully expressed the meaning. Trans. 'endowed with,' 'having.' This pleonastic use of *cum* is not uncommon. See Roby, 1881; Madvig, 258. **350. omne**: not 'every' nor 'whole,' but 'throughout,' 'every part of.' **351.** Observe the chiasmus; see n. to 22–23. — **fundunt**: Lucr. is fond of this word. Cf. 175; Cic. De Sen. 14, 51 *fundit frugem spici ordine structam.* **352. totas**: supply *arbores* from *arbusta* above. In 253 the use of *ărbŏrēs* is avoided by supplying *ipsae* from preceding *arboribus.* See n. to 187. **356. inania**: see n. to 223. — **possint**; Munro's reading for *possent;* a judicious change. So below 593, 597, 645. **358** *et seq.* For this and other Epicurean arguments regarding the void see Zeller 'Prae-Soc. Phil., ii., 218; 'Stoics, Epicureans and Sceptics' ch. 17. **360. glomere**: the *o,* short by nature, is here made long. **361. par est**: 'it is natural.' **362. deorsum**: scanned *dĕōrsum.* The Epicurean view that matter tends downward by its own weight is explained 2, 184–215. **363. inanis**: substantive, dep. on *natura; natura inanis,* like *natura aquai, mellis, animi,* etc., is somewhat pleonastic. **364. que**: 'and yet,' mildly adversative; a use sometimes found in both prose and verse, more frequently after a negative. **365. nimirum**: 'beyond doubt,' emphatic. This is a favorite word of Lucr. in introducing a strong assertion. **368. est** = existit; emphatic by position.

It is asserted that motion can take place without void by the displacement of matter, but falsely; for without void there could be no beginning of motion (370–383). *Wrong too is the notion that when two bodies start apart, the air between them was previously there condensed; the air rushes in to fill the void, but could not itself condense unless there were void in it* (384–397).

370. **Illud**: see n. to 80.—**vero**: substantive. 371. Aristotle and the Stoics combated the notion that void is necessary for motion. Cf. Sen. Nat. Quaest. 2, 7 *Quidam* (i. e. *Democritus et Epicurei*) *aëra discerpunt et in particulas diducunt, ita ut illi inani permisceant, argumentum autem existimant non pleni corporis, sed multum vacui habentis, quod avibus in illo tam facilis motus, quod maximis minimisque per illum transcursus est. Sed falluntur, nam aquarum quoque similis facilitas est, nec de unitate illarum dubium est, quae sic corpora accipiant, ut semper in contrarium acceptis refluant. Hanc nostri circumstantiam, Graeci* ἀντιπερίστασιν (e. g. Arist. Phys. 8, 10, 12) *adpellant, quae in aëre quoque sicut in aqua fit, circumsistit enim omne corpus a quo impellitur: nihil ergo opus erit admixto inani.* 373. **post**: here an adv. 374. **quo**: = *in quae.* 377. **totum**: trans. as adv. A. 191; G. 324, Rem. 6; H. 443 and n. 1. (2). 381. **corpora**: see n. on 111 *poenas.* 381–2. **aut . . . aut**: a dilemma, in which each proposition involves a contradiction; *aut . . . aut* is used with propositions mutually exclusive. The Epicureans admitted the reality of motion and the existence of void; Melissus took the other horn of the dilemma and, denying the existence of void, sought to show therefrom the impossibility of motion. His reasoning is interesting. "Every movement presupposes a void; that which can receive another into itself is void; that which cannot receive another is full; that which moves can do so only in the void. But the void would be non-existent, and the non-existent does not exist. Consequently there is no void, therefore no motion." See Zeller, 'Prae-Socratic Philosophy,' i. 635. As regards the soundness of the dilemma the philosophers of to-day are not much more able to pronounce with certainty than in the time of Epicurus, for each of the statements must be treated as an induction; and in the present limited range of scientific knowledge, when even the atom of which men speak with so much positiveness rests on an hypothesis, certainty regarding them is unattainable. 383. **initum**: = *initium;* so also 2, 269 *initum motus;* trans. 'the beginning of motion.' *Init. mo.* does not = ἀρχὴ

κινήσεως, to which it bears an apparent resemblance, and which is expressed in Latin by *principium motus*, 'principle of motion.' Void is looked upon not as the cause but as the necessary condition of movement. Cf. Arist. Phys. 3, 1, 2. 384. **de**: 'after'; but see Munro's note. 390. **ille**; as *is* above, refers to *aër*. The air rushing in cannot fill the entire space at once; it will first flow into the various parts, one after another, then finally the whole space will be taken up by it.—**omnia**: i.e. *omnia loca*; *omnes* might have been expected from the preceding *locum*; but Lucr. has both forms of the pl. With the change of gender here cf. 1, 351-2 *arbusta . . . totas*; 1, 450 *rebus . . . horum*. 392. **id fieri**: i.e. that air is found between bodies immediately after separation. 395. **denserier**: see n. to 207. Lucr. has only forms of *densere*, though many edd. read 5, 491 *densabunt*. So above *condenseat*, which is the only form of the *e*-stem of the compound known. 397. **trahere**: intrans.; 'to draw' into 'itself': = *se trahere*.

Many other arguments there are; but enough. For old age would overtake us ere all could be presented on any one topic of our theme (398-417).

398. **causando multa**: 'by urging many objections.' 400 **possum**: this properly expresses the conclusion of a conditional sentence in which *commemorando* takes the place of a protasis. The Latin requires the historical tenses of verbs of ability, propriety, necessity, and obligation in the apodoses of conditional sentences to take the indic., whatever the mode or form of the protasis. In like manner the present *possum* is often used in both prose and verse. Cf. below 411. In such cases trans. *possum* 'I might,' 'I could.' 401. **conradere**: this rare word in its literal meaning 'to scrape together,' 'gather together,' is found 6, 304 and 444. In a figurative sense it is used only here: and in his choice of this term perhaps the poet wished to imply the difficulty of the act. 402. **sagaci**: see n. to 130. 403. **tute**: emphatic from position as well as in form. 404-5. *ut canes persaepe naribus inveniunt quietes* ('lair') *montivagae ferai* etc. The simile carries out the suggestion in *sagaci*: *intectas* concessive, 'though covered.' Cf. Cic. De Sen. 11, 37 *Appius regebat et caecus et senex*, 'though both blind and old.' 406. **instituerunt**: the *e* is short, as often in the perfect in Lucr. Of course *instĭtĕrunt*, *con-*

stĕterunt and the like could not stand in hexameter verse; but the choice of the form with short *e* was not altogether determined by the metre; cf. 5, 474 *fuĕrunt*. In the time of Lucretius *ĕrunt* was undoubtedly still a current pronunciation. **407. alid**: see n. to 263. **409. insinuare**: see n. to 113. — **inde**: = *ex eis*. **410. pigraris**: not from *pigror*, but contr. for *pigraveris;* the deponent form is found but once, Cic. Att. 14, 1, 2. The mood of *pigr.* and *reces.* is of course subj — **ab re**: 'from the subject.' **411. de plano**: a phrase from the law-courts, referring to decisions rendered informally anywhere, as distinguished from those *ex loco superiore*, i. e., from the elevated seat of the judge in formal trial. Out of the technical meaning 'off the bench,' 'informally,' came the use here, = 'readily,' 'easily.' **412–417.** In antiquity the display of firm self-confidence was reckoned almost a virtue. Livy says of Romulus (1, 10) *cum factis vir magnificus tum factorum ostentator haut minor*, a characterization that well exemplifies the Roman spirit. In philosophy the earlier Stoics and Epicureans showed an uncompromising dogmatism, which, professing to know the whole truth, treated with contempt all theories but their own. Among the poets the same spirit was manifested for the most part in bold prophecies of immortality for their productions; Ennius, Vergil, Horace, Ovid, Propertius, and Martial foretold the honors that posterity would pay to them. So, too, Shakespere has said, —

> "Not marble nor the gilded monuments
> Of princes shall outlast this powerful rhyme.

In Lucr. there was no touch of vanity or overweening self-assertion. Fired by his great design of freeing men from the ills of superstition, and fully believing that he had found the truth, he went boldly to proclaiming 'the true reason' as the greatest boon and blessing. Cf. 1, 921–950; 2, 730. **412. fontibu'**: see n. on 159 *omnibu'*. The reference in *font. mag.* is to the abundant teachings and writings of Epicurus. Cf. n. to 3, 10. **413. pectore**: see n. to 3, 140. **415. vitai claustra**: 'life's fastnesses.' Cf. 3, 396; 6, 1153. **416. tibi**: a loose use of the dat. with the predicate as a whole, where a pronominal adj. (*tuas*) might have been expected. **417. sit . . . missa**: for the mood see A. 327; H. 520. — **ccpia**: 'store.'

3. Matter and void alone make up the universe. 418-482.

There is matter, there is void (418-429). *Besides matter and void there is no third nature* (430-448). *Whatever exists is either a property or an accident of matter and void* (449-482).

418. 'But now to proceed to weave throughout in verse the design begun.' 419. **ut est**: 'as it is,' 'as it stands.' Munro in his 3rd edit. takes *per se* with *ut est* and trans. 'all nature, then, as it exists by itself,' which does not seem to make as good sense as the other constr.; but see his n. 420. **constitit in**: 'is made up of.' With this meaning *consistere* is followed by the simple abl. or by the abl. with *ex* or *in*. Lucr. has the three constructions, but *in* only with *rebus* here. He has likewise *constare re, ex re*. — **corpora**: i.e., both atoms and the things made up of atoms. 421. **diversa**: 'in different directions,' 'about'; the common use of an adj. having the force of an adv. — **moventur**: the passive of *movere* is often used where the English idiom requires the active. 422. **per se**: refers to *corpus*, not to subj. of *dedicat*. — **esse** : = *existere*. — **communis sensus**: κοινὸς νοῦς, the general conviction of men, 'common sense.' To this the Stoics as well as the Epicureans appealed. Epictetus (Diss. 3, 6) thus defines it: "There are certain things which men, who are not altogether unsound, see by the common notions which all possess. Such a constitution of the mind is named common sense." But the distinction must be carefully observed between 'common sense,' as used in the present passage, denoting simply the general conviction of men, and 'common sense' in its popular signification, with "an acquired perception or feeling of the common duties and proprieties expected from each member of society." The latter is the prevalent meaning in Cicero and Seneca, and is found also Hor. Sat. 1, 3, 66; Juv. Sat. 8, 73. For full discussion of this point see 'The Works of Thomas Reid,' ed. by Hamilton, i. 109 and ii. n. A. § v. It is in the former signification that common sense is the characteristic term of the Scottish Philosophy. As the Epicureans believed in the absolute trustworthiness of the senses, and that from these all knowledge comes (cf. 4, 379 *et seq.*), they held of course (since the senses are the same for all men) that those things regarding which the general belief of mankind is unanimous must be accepted as true. [The above n.

was written before seeing Munro's n., in which the same passage of Hamilton is referred to, quoted from Mayor on Juvenal 8, 73.]

423. **cui . . . queamus**: 'and unless at the very outset our belief in this shall be firmly grounded, there will be nothing to which we can appeal on hidden things in order to prove anything by reasoning of mind.' *Cui*, as Munro remarks, depends on *fides*; it refers to *communis sensus*. Is there not here an appeal to consciousness, based on the deliverances of the consciousness of men in general? "That our immediate consciousness, if competent to prove anything, must be competent to prove everything it avouches, is a principle which none have been found, at least openly, to deny." Hamilton, ut sup. n. A. § ii. In last analysis, then, in the appeal to the direct knowledge, the irresistible conviction of the *ego*, the position of Lucr. is that of the Scottish philosophy. — **valebit**: fut., where the Eng. idiom generally prefers the present. 426. **quod**: grammatically the antecedent is *spatium*, but logically it is the concept expressed by the two words, *locus* and *spatium*. 427. **foret**: = *existeret*. *Forem* is used instead of *essem*, particularly in conditional sentences and clauses expressing purpose. It is rare in Cicero. See Madvig, 377, obs. 2. For the argument cf. Epicurus in Diog. Laert. 10, 24, 40 'If what we call the void, or space, the intangible nature, did not exist, bodies would not have a place in which to exist, nor throughout which they could move, as we see they do move.' 429. **supera**: old form of *supra*, probably at first an abl. from *superus*. For use see n. on 66 *contra*. The prep. use is found 6, 505. Cf. 4, 672; 5, 1407. 431. Observe the chiastic arrangement. 432. **quod**: *quae* might have been expected, attracted to *natura*. — **quasi** etc.: 'might count, as it were, as a third nature.' — **numero**: somewhat pleonastic: *numero*, literally 'by count,' is often thus attached to expressions of number, having lost its original force and merely strengthening the expression. So *saepe numero*. 433. Whatever has existence must itself be something. 434. **tactus**: 'touch,' i.e., power of resistance to the senses, of awakening sensation by contact. — **quamvis**: with *lev. exig.* — **levis exiguusque**: 'light and delicate'; the latter word expresses a less degree of fineness or minuteness than the former. 435. **augmine**: goes with *augebit*. — **dum sit**: 'provided it (really) exists.' 436. **numerum**: 'quantity.' — **summ. seq.**: i.e., *summae omnium rerum iungetur*. No matter how small anything is that is tangible, it is a part of the mass or body of the universe.

437. **intactile**: found only here. — **nul. de parte**: 'not on any side.' — **quod**: with *queat* characterizes the subject of *erit*, to be supplied from *cui* above. 438. **queat** etc.: *queat prohibere ullam rem meantem transire per se*. In Lucr. *prohibere* is also followed by the subj. with *ne* and *quo minus*. Cf. 1, 977; 2, 288. 439. **vacuum**: adj. with *inane*. 440. **per se . . . erit**: as above *per se . . . esse*. — **quid**: indefinite = τὶ; in this sense generally found with *si*. 441. **fungi**: = πάσχειν, 'to suffer,' opposed to *facere, agere* 'to do,' 'to act,' referring to the active and passive qualities of matter. 442. **erit**: supply *tale*. The position of 440-3, which limits existence to matter and void, would not of course be accepted by any one but a thorough-going materialist. 443. By this verse, even more directly than by the preceding proposition, the poet shuts out from his system the possibility of the existence of God or spirit in the ordinary sense of the term. All phenomena, as he proceeds to explain, are reducible to states and relations of matter and void; as matter is the only reality, in the end phenomena reduce to states of matter. This is precisely the position of modern materialists. Cf. Herbert Spencer, 'Prin. of Psychology,' i. p. 267: "It is one and the same Ultimate Reality which is manifested to us subjectively and objectively. For while the nature of that which is manifested under either form proves to be inscrutable, the order of its manifestations throughout all mental phenomena proves to be the same as that throughout all material phenomena." In the Spencerian view that 'Ultimate Reality' is corporeal. For the position of Huxley, etc., see Wainwright, 'Scientific Sophisms,' ch. 10. For full discussion of Democritus and Epicurus on this point, with references to original authorities, see Zeller, 'Stoics, Epicureans, and Sceptics,' ch. 17, A (3). 444. **vacans**: substantive. See n. to 330. 448. **apisci**: for *adipisci*.

449. **cluent**: 'are named,' i.e., 'exist.' See n. to 119. — **coniuncta**: = τὰ συμβεβηκότα, 'the essential properties.' Supply *esse*. — **duabus rebus**: i.e., matter and void. The dat. depends on the verb-idea in *coniuncta* (A. 227, *d*; H. 392, I.); 'linked to these two things.' 450. **horum**: for *harum rerum*. Cf. 390 *omnia* and n. — **eventa** = τὰ συμπτώματα, 'accidental properties,' 'accidents.' With the thought cf. Epicurus in Diog. Laert., 10, 24, 40 'one cannot conceive, either on the basis of perception or on analogy to the objects of perception, any qualities common to all natures which are not essential properties or accidents of these things (i.e. matter and void).' This doctrine

of 'properties' Epicurus took from Aristotle. See Arist. Met., 10 (11), 8 and passim. See also Ritter, 'Hist. of Anc. Phil.,' Bk. 10, Pt. 4, ch. 2 *The Canonic* for full discussion and citation of authorities.
451. permitiali: so two of the best MSS.; *perniciali* is the common reading, adopted also by Lachmann. The meaning is the same in either case. *Permitialis* is found only here; but *permities* 'destruction,' 'ruin,' 'decay' is several times met with. **452. potis**: here not declined; *pote*, however, is sometimes met with. Either form is rare in classical prose, where *potest* is used instead. — **seque greg.**: tmesis; *sēgrĕgāri* would not suit the metre. **453. liquor**: the *i* is here lengthened. **454.** Lachmann has shown that this verse is an interpolation. The datives are inconsistent with the preceding genitives, and the nom. *intactus* is a barbarism. **457. natura**: i.e. *rei ipsius*. Observe the elegant and forcible arrangement of words. **459**: **est**: = *existit*. "Here too," Munro remarks, "Lucr. is combating Chrysippus and the Porch, who taught that time was not only ἀσώματον, but also like void καθ' αὑτό τι νοούμενον πρᾶγμα." The same argument is stated by Epicurus in Diog. Laert. 10, 24, 40. No better proof of the surpassing poetic power of Lucr. is needed than the contrast between the dry, hard statement of Epic. and the spirited and lucid treatment of the same question here. "One of our commonest errors is to regard time as an agent. But in reality time does nothing and is nothing." Fleming, 'Vocabulary of Phil.' art. *Time*. **460. conseq. sens.**: 'the sense apprehends.' — **aevo**: 'the past,' a rare meaning of this word. **461. instet**: 'is present.' — **quid ... seq.**: cf. Cic. De Sen. 19, 69 *nec praeteritum tempus nunquam revertitur nec quid sequatur sciri potest*. — **deinde**: scanned *dĕĭnde*, as often. **462–3.** The doctrine that time cannot be known apart from motion and rest was worked out by Aristotle. Lucr. is in error in denying utterly its objective existence, as he does 459. We reach our conceptions of time and space only through experience; indeed experience is apprehended by us only in terms, as it were, of time and space; but that there are relations outside of ourselves corresponding to these conceptions, few will deny. Lucretius' error originates in the notion of 'existence' held by the Epicureans, Eleatics, and most ancient philosophers. By them 'existence' was predicated either of matter alone, or of matter and spirit, or of matter and void; but properly speaking the concept covers both substance, physical and spiritual, and relations, as cause and effect, space, time. The

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failure to notice this distinction involved the ideas of most of the ancients about time and space in utter confusion; and, in fact, the subject is even now not entirely cleared up. **464. Tyndaridem**: Helen. The poet proceeds to show that all things of history are accidents of matter and void. The causes, characters, scenes, and incidents of the Trojan War formed a body of stock illustrations, which was drawn upon for the most different uses by both Greek and Latin writers. To the Romans allusions to the Trojan War seem to have been specially welcome, because of the traditions connecting with it their origin as a people and the genealogies of leading families. **465. Troiiugenas**: the spelling adopted by Lachmann and Munro from the best MS., A. The other MSS. and edit. have the common form *Troiugena* (*Trojugena*) given by the dictionaries. So 476 *Troiianis*, 477 *Graiiugenarum*. — **dicunt**: 'they say,' i.e., the Stoics, who considered time as immaterial, yet gave "to the conception of time a meaning as concrete as possible," that time might have a real value. "Zeno defined time as the extension of motion; Chrysippus defines it more definitely, as the extension of the motion of the world." See Zeller, 'Stoics, Epic. and Scep.' ch. 8, A. The ideas of the Stoics were very confused regarding both time and space. 466. *ne forte cogant nos fateri haec per se esse* (*existere*). 467 *et seq.* We should not admit that, since the men themselves have passed away, the accidents of them remain as real existences, particularly the 'accident of accidents,' time. **469. aliut . . . al.**: final *t* for *d* is rare except in inscriptions. Trans. 'in the one case . . . in the other.' — **Teucris**: Munro's emend. for *terris;* Lachm. has *per sest*, a much less probable reading. **474. Alexandri**: Paris, while a shepherd on Mt. Ida, having shown great courage in protecting the flocks and his companions, received the name Alexander (*ἀλέξ–ανδρος*, 'defending men'). By this name he is usually designated in the Iliad. **475. clara**: in this word Munro sees a play on the two meanings of *clarus*, 'famous in story,' and 'bright,' in reference to the flames of war. **476. clam**: prep. with *Troiianis;* rarely used with the abl.; see Roby, 1877. It may be that *clam* is an adv. and *Troii.* a dat. of disadvantage. — **durateus**: transferred from the Greek *δουράτεος* 'wooden,' and used only of the horse before Troy. Cf. Hom. Od. 8, 493 and 512. **477. equos**: earlier spelling of *equus*: *ecus* is also found in Lucr. **480. cluere**: as in 449. **482. loci**: for *inanis*.

iii. THE NATURE OF MATTER.

A. THE EPICUREAN VIEW. 483–634.

1. Atoms, of which matter is made up, are solid, without void. 483–527.

That there is anything absolutely solid is not known from the senses, but through reason. 483–502.

483 *et seq.* That these lines embody the view of Democritus is apparent from Diog. Laert. 9, 44. The thought is exactly that of Epicurus id. 10, 24, 40–41: 'Of bodies some, indeed, are combinations, others are (the elements) out of which the combinations have been made. The latter now are indivisible (ἄτομα) and unchangeable; else indeed all things would be reduced to non-existence. But of their own power in the dissolution of the combinations they survive, because in their nature they are full, and thus show no aspect of weakness, nor any mode in which they can be destroyed. Therefore, of necessity the first principles of things are indivisible bodies.' Cf. the statement of Sir Isaac Newton: "It seems probable that God in the beginning formed matter in solid masses, hard, impenetrable, moveable particles of such size, figures, and with such other properties and in such proportions to space, as most conduced to the end for which he formed them; and that these primitive particles, being solid, are incomparably harder than any porous body compounded of them, — even so very hard as never to wear or to break in pieces." See Lange, 'Hist. of Materialism,' section 3, ch. 3; 'Popular Science Monthly,' 1881, p. 837. Cf. also Herbert Spencer, 'Prin. of Psychology,' 3d Am. edit. i. 155: "There is reason to suspect that the so-called simple substances are themselves compound; and that there is but one ultimate form of matter, out of which the successively more complex forms of matter are built up. By the different grouping of units, and by the combinations of the unlike groups each with its own kind and each with other kinds, it is supposed that there have been produced the kinds of matter we call elementary; just as, by further composition simultaneously carried on, these produce further varieties and complexities." See also Zeller, 'Prae-Socrat. Phil.' ii. 220–1, 228; Tyndall, 'Fragments of Science,' 5th edit. p. 475. Consult

particularly Stallo, 'Concepts and Theories of Modern Physics,' ch. 4. Homogeneity of matter, it is worth while to remark, is not a necessary postulate of materialistic evolution. See Elam, 'Winds of Doctrine,' p. 35. **484. concilio**: a technical term in Lucr. for the 'union' or 'combination' of atoms. The subject of atoms is more fully discussed 2, 80–580; that of the combination of atoms, 2, 581–1174. **486. stinguere**: = *extinguere*. The simple verb is rarely used except by Lucr., perhaps not by any other writer except Cicero in the Aratea. **487. etsi**: as in 120, where see n. **491. vapore**: 'heat'; the word in classical Latin never corresponds to our 'vapor.' **495. utrumque**: i.e. *calorem frigusque*. **501. semina** etc.: see n. on 55 *primordia*.

Matter and void have nothing in common; where one is, the other is not; in atoms there is no void. 503–527.

506. sibi: added for emphasis. Munro compares the English expression 'in and for itself.' — **puram**: 'unmixed.' **508. ea**: *eā* is often explained as an abl. with *parte* or some such word understood. While such was doubtless the original use, in cases like this it should be considered an adv. — **qua por. cumq.**: tmesis. **511–7.** In things (not atoms) there is void, which could not be unless the bounding first beginnings were solid and impenetrable. **520. vocaret**: old form for *vacaret*, as the early *vocivos, vocuos* for *vacivus, vacuus*. **523. omne quod est**: i.e., 'the universe.' — **constaret**: = *esset; vacuum* and *inane* are of course adj. **524. alternis**: old abl. pl. used as adv.; common in Lucr. but rare elsewhere; 'in alternate layers.' **525. plenum**: = τὸ πλῆρες 'the full,' as distinguished from *vacuum* τὸ κενόν 'the empty.' *Plenum* is a term applied to matter from its extension, *corpus* from its power of resistance. Cf. n. to 55, where the words for the ultimate forms of matter are discussed. — **naviter**: the original force of this word was 'diligently'; then, as one is wholly intent upon the business in hand, 'wholly,' 'entirely,' the meaning here. As subject of *extat* (= *est*) supply *omne quod est*.

2. Atoms are indestructible and eternal. 528–634.

The atoms, being without void, are impenetrable; and hence can be affected neither by blows from without, nor by anything permeating within (528–539). *If it were not thus, long ago all things had been reduced to nothing* (540–550).

528. **plagis**: blows, or impact of atoms, and masses, held a very important place in the Epicurean philosophy, both in the explanation of the natural processes of growth and decay and in the doctrine of sense-perception. 531. See 485 et seq. 532. **conlidi**: 'crushed together,' 'crushed in.' 533. **bina**: 'into two parts,' 'in two'; rarely used as here without a substantive. 534. **manabile**: found only here; =*penetrale.* 537. **tam**: for *eo*, to correspond with *quo.* — **his rebus**: i.e. *umore, frigore, igni*, the three great disintegrating agencies. A modern physicist would add electricity. 540. **fuisset**: the imper. tense might have been expected, as indestructibility is an essential, ever-present quality of matter, 'if matter were not,' etc. But the plup. is more logical, the implication being, 'if matter from infinite past time had not been,' etc. In the expression of general truths, however, the Latin tense-idiom is at variance with the English. For the thought cf. Epicurus in Diog. Laert. 10, 24, 55 'It is necessary that something remain indestructible that all things may not be reduced into non-existence.' 543. **supra**: 150 (where see n.) *et seq.* 546 **quo**: =*in quae.* 548. **solida . . . simpl.**: 'solid singleness,' a phrase often used by Lucr., by which he forcibly suggests not simply the impenetrability, but also the individuality, as it were, the distinct separate existence of the atoms. 549. **aevom**: 'eternity.' This word is used by Lucr. also to express limited time, as below 553 *aevo priore* 'the past,' 564 *aevi* 'life-span,' 'age.'

If there were not a set limit to the breaking up and destruction of matter, before this it would have been so far reduced that all growth would be impossible; for things are destroyed more rapidly than renewed, and an infinite future could not repair the wreck of an infinite past (551–564). *Again, while it is seen how with void from indivisible particles soft things are produced, it is inconceivable how from soft first-beginnings hard things could come* (565–576).

551. **Denique**: as in 199 where see n. 554. **a cer. temp.**: 'within a fixed time.' 555. **summum . . . auctum**: 'reach its utmost growth of being.' *auctum* is Munro's emend. for *finem*, which is obviously wrong; for *finis* elsewhere in Lucr. is fem., and besides here does not suit the sense. Lachm. reads *conceptum summa aetatis pervadere finis.* 557. **diei**: 'length,' 'period,' depends on *aetas* 'duration,' and is limited in turn by *temporis.* Munro, however, says

the simplest constr. seems to be "to suppose the clause a double one," *quod longa diei aetas*, [*hoc est*] *infinita aetas anteacti temporis* etc. For the scanning *diēī* see n. to 5, 102; for that of *antĕācta* see n. to 233. 559. **quod**: for antecedent supply *id* as subj. of *posset.* — **fregisset**: *frangere* means 'to break up' a thing, usually a whole, by destroying its structure; *disturbare*, 'to demolish' by rending the parts violently asunder; *dissoluere*, 'to destroy utterly' by reducing a thing to its primal elements, leaving not the least vestige or trace of its form or properties. 560. **relicuo**: scanned *rēlĭcŭō*; all the forms of this word in Lucr. are read as four syllables. See n. to 215; and cf. 3, 648; 4, 976. 564. **aevi**: see n. to 549. 565. **solidissima**: predicative; *constant* = *sunt.* 566. **cum**: 'while,' 'although,' mildly concessive. In Plautus and Terence generally, sometimes even in classical prose, *cum* concessive and *cum* causal are found with the indicative; the regular classical constr. however requires the subjunctive. Here the indic. is especially forcible, as the thing conceded is looked upon as a fact. — **possit**: Munro's and Sauppe's emend. for *possint;* the pl. crept in from the proximity of *constant* and *omnia.* Trans. *tamen* (*ratio*) *possit reddi quo pacto omnia, quae fiunt mollia,* (*ut*) *aër, aqua, terra, vapores fiant et qua* etc. 567. **vapores**: heat was thought to be not merely a property of combinations of atoms but itself a form of matter. Cf. 2, 153 *corpuscula quaeque vaporis*, 2, 843 etc. 571. **silices**: wrongly taken by some to mean 'cliffs' or masses in rock in general; rather, literally, 'flint stones,' as the type of all that is hardest in rock formation. Munro thinks there is a reference to the hard blocks of basalt with which the Romans paved their streets and roads. With this technical sense *silices* is sometimes found in inscriptions, as well as in Livy, and occasionally elsewhere. 572. **poterit**: on the mood and tense of the apodosis see A. 307, *b*, Rem. and foot-n.; H. 511, 1, n. 1. Cf. 3, 931–950 *si vocem rerum natura repente mittat . . . quid respondemus?* The indic. is generally used by Lucr. in conditional clauses with *possum;* cf. 656 below. 575. **condenso**: stronger than *denso* from the force of the *con-*. *Cond.* is common in Lucr., and is sometimes met with in other poets, but is rare in prose. *magis* here goes with *cond.* 576. In illustration of lines 565–573 Munro quotes a remarkable passage from Newton: "All bodies seem to be composed of hard particles: for otherwise fluids would not congeal. Even the rays of light seem to be hard bodies . . . and therefore hardness may be reckoned the property of

all uncompounded matter. . . . Now if compound bodies are so very hard as we find some of them to be, and yet are very porous and consist of parts which are only laid together, the simple particles which are void of pores and were never yet divided must be much harder. For such hard particles being heaped together can scarce touch one another in more than a few points, and therefore must be separable by much less force than is requisite to break a solid particle whose parts touch in all the space between them without any pores or interstices to weaken their cohesion." Emerson represents nature as saying: —

> "No ray is gone, no atom worn,
> My oldest force is old as new,
> And the fresh rose on yonder thorn
> Gives back the bending heavens in dew."

Suppose there is no limit to the divisibility of matter; still there are elements not as yet reduced, of which all things that exist are composed. But these, unless indestructible, could not have withstood the forces of dissolution from infinite past time (577–583). *All nature is under the reign of law. This could not be if there were not in matter elements incapable of change or decay* (584–598).

579. **superare**: = *superesse*. 580. **clueant**: = *sint*; cf, 449. 582. **discrepat**: 'it is inconsistent,' i.e. with the assumption that matter is infinitely divisible. The argument is a kind of *reductio ad absurdum*, in which, however, the conclusion is not directly stated, but may be readily supplied. 584. **generatim**: see n. to 20. 586. **quid . . . queant**: *queo* and *possum* are often used absolutely in the sense of *qu. facere* or *agere*, *pos. fac.* or *agere*. In construing *quid* and the like in such cases, instead of supplying *facere*, as is often done, it is better to consider them as adverbial acc. A like constr. is met with in other languages. For the English cf. Browning 'A Death in the Desert,' "Lower than God, who knows all and c a n all;" Bacon, 'Essay on Great Place,' "the best condition is not to will, the second not to c a n;" Shakspere 'Hamlet,' "The French, who c a n well on horse-back." — **foedera naturai**: the conception of law, universal, all-potent, pervades the entire philosophy of Lucr. See p. xxxii. 587. **sancitum**: = *sanctum*; a rare form. — **quandoquidem**: the ō is always scanned short by Lucr. Cf. 1, 296; 2, 1087; 2, 969; 3, 457 etc. 588. **quin** etc.: 'but all things are so constant.' 589. **in**

ordine · 'in succession'; i.e., one generation after another. **590. generalis**: common to their kind; e.g., bobolinks generation after generation keep the same marking of white and black. **592. debent**: for subject refer back to *omnia*. **594-7.** Cf. 75-7 and n. **597. referre**: 'reproduce.' Cf. 4, 1218-9.

As atoms, which lie beyond the ken of sense, are parts of things, so the atoms themselves are composed of parts; but with this difference. The parts of the atom are absolutely limited in size and are inseparable from one another, having existed in union from all eternity, so that the atom cannot be broken up, but remains a unit (599-614). *Furthermore, if the atom were infinitely divisible there would be no difference between the least thing and the greatest, since both alike would be composed of infinite parts, and thus be equal* (615-627); *if the atom were divided into the least parts, these could not have the properties which matter, to form the basis of existence, must have* (628-634).

599-608. This passage is exceedingly difficult. Munro's explanation is the best. After 599 he thinks two lines have been lost, and thus fills out the sense: 'Then again, since there is ever a bounding-point [to bodies, which appears to us to be a least, there ought in the same way to be a bounding-point the least conceivable] to that first body, which is already beyond what our senses can perceive: that point sure enough is without parts' etc. **600. corporis**: i.e., the atom. On the view that the atom can be known not by sense but by reason, see Zeller, 'Prae.-Socrat. Phil.' ii. 219, 225 and nn. with references to original authorities; Id. 'Stoics, Ep., and Scep.' p. 442. Cf. Tyndall, 'Frag. of Sci.' p. 71: "Indeed the domain of the senses in Nature is almost infinitely small in comparison with the vast region to thought which lies beyond them." **601. id**: i.e. *cacumen*; 'it has no parts, but is itself one of the parts of the atom, having no conceivable existence apart from the atom.' — **extat**: = *est*. **604-5.** 'and so a first and single part, and then other and other similar parts in succession, fill up in close serried mass the nature of the first body' (*corporis*, the atom). The atom is thus divisible only in thought, not in reality. **608. haerere unde**: 'cling to that from which.' **610. arte**: adv. **611. illarum**: Munro's emend. for *illorum*. **613. unde**: = *a quibus*, i.e., a *primordiis*. **614. semina**: supply *ea* or *ea esse*.

615. parvissima: the regular superlative of *parvus* is rare; it here takes the place of *minima* because *minimum* is used in a technical

sense to express 'the least thing' absolutely. 617. **pars**: = *dimidia pars*. In cases like this *pars* takes the meaning of 'one-half,' 'one-third' etc. according to the context. 618 **praefiniet**: 'set bounds' to the division. 619. **minimam**: supply *rem*. — **escit**: archaic future of *esse*, inchoative in origin. It is found four times in the fragments of the Twelve Tables and in a few places elsewhere. With the development of the future force from the inchoative form Wordsworth compares the use of the German *werden;* see his 'Fragments and Specimens of Early Latin,' p. 511; also Roby, 722. Trans. here as if *intererit, distabit*. 620. **nil . . . distet**: = *nil distabit*. The reasoning in 615–622 was borrowed by the Epicureans from the Eleatics. Granted that matter is infinitely divisible, the least thing as well as the greatest will be made up of an infinite number of parts; thus there will be no difference between them, because infinities are equal. Exactly the same was the view of the Indian materialist Kanada, who taught that if matter were infinitely divisible a grain of sand would be "equal to a mountain, both being infinite." See Fleming, 'Vocab. of Phil.' art. *Atom*. The argument is a paralogism, as has often been shown. It assumes that anything which can be divided into an infinite number of parts is infinite, and that all infinities are equal. We conceive of space, for example, as infinitely divisible; hence any measure in space, as a mile, an inch, is infinitely divisible; but the mile and the inch are not therefore equal divisions of space. 625. **ea**: refers to the parts of the atoms; so *quae* in 626. 627. **illa**: i.e., the atoms: *quoque*, i e. as well as the inseparable parts of which atoms are made up. 632. **possunt**: supply *habere;* 'cannot have those properties which' etc. The argument in 628–634 must be carefully distinguished from that of Democritus borrowed from Zeno, "that an absolute division would leave no magnitude remaining, and therefore nothing at all." See Zeller, 'Prae.-Soc. Phil.' ii. 219. In illustration of our poet's position Munro quotes Maxwell, 'Theory of Heat,' p. 285: "We do not assert that there is an absolute limit to the divisibility of matter; what we assert is that after we have divided a body into a certain finite number of constituent parts called molecules, then any further division of these molecules will deprive them of the properties which give rise to the phenomena observed in the substance." On the value of the argument see Stallo, 'Concepts and Theories of Mod. Phys.' ch. 7. — **genitalis**: 'begetting;' used with *materies* only here, but with

corpora 58 and 167. **633-4.** The poet enumerates the principal characteristics of the atoms and their movements, through which combinations are made possible; *conexus*, 'entanglements' resulting from various shapes; *pondera*, 'weights,' which differ according to the size of the atom, as the specific gravity was supposed to be the same for all; '*plagas*, 'blows,' see n. to 528; *concursus*, 'clashings,' meeting and pressing together of atoms; *motus*, 'motions' in general without reference to impact. Cf. 2, 725-9; 5, 437 *et seq.*; 1, 685 and n.; 2, 80-332.

B. Refutation of other Views of the Nature of Matter. 635-920.

1. Matter is not made up of the different forms and states of a single element,—of fire, or air, or water, or earth. 635-711.

The doctrine of Heraclitus and his followers that fire is the primal substrate is unsound (635-644), *because it fails to account for the diversity of existing things* (645-654); *and because it denies the existence of void — a position inconsistent with their theory of rarefaction and condensation* (655-671). *The truth is to be found only in the doctrine of the atom* (672-689).

637. videntur: 'are seen.' The poet has now laid down the fundamental doctrines of his system. Before applying them to the explanation of things, he proceeds to combat briefly and in a masterly way the wrong views about matter held by other philosophers, particularly Heraclitus, Empedocles, and Anaxagoras. **638. Herac.**: Heraclitus of Ephesus (lived about 500 B.C.) taught that there is a single primitive essence, fire, from which all things are derived. But to him fire was something more than the ultimate matter. It was both matter and force, rational force. It was also the symbol of change; for opposed to the Eleatic idea of a changeless world he held that there is nowhere, never, rest or pause; that all things are ever in state of transition between opposite states. This fire, he held, goes over into all the various forms that we find in the universe by qualitative change, as the result of which appear rarefaction and condensation. From an impulse of its own nature as rational force, fire in part became transmuted into moisture, moisture then into earth. Thus by trans-

mutation and mixture of resulting substances the world is made up; but there is constant change from one state or form of matter to another; and at the close of a fixed cycle of ages all things are resolved back again into the primal essence, — the universe becomes a vast chaos of waving flame. Again, the process of transmutation and the unstable equilibrium of opposites in one substance will produce another world; and so on through the innumerable cycles of eternity. This theory of Heraclitus, with some changes, was adopted by the Stoics as the basis of their physics. The best account of H. is by Zeller, 'Prae.-Soc. Phil.' vol. ii. Consult also Ueberweg, 'Hist. of Phil.' vol. i.; Ritter, 'Hist. of Anc. Phil.' vol. i.; Lewes, 'Biog. Hist. of Phil.' — **quorum**: a school of Heracliteans existed for several generations after the death of H. But the reference is here more particularly to the Stoics, whom Lucr. takes every opportunity to attack. For the reason that in this discussion of Heraclitus he is combating his most earnest opponents the poet waxes far more ardent than in his later criticisms of Empedocles and Anaxagoras. **639. obscuram linguam**: the darkness of meaning in the utterances of Heraclitus gained for him the epithet ὁ σκοτεινός 'the obscure.' See Arist. De Mundo 5, 5; cf. Cic. De Fin. 2, 5, 15 *si de industria facias, ut Heraclitus, 'cognomento qui σκοτεινὸς perhibetur, quia de natura nimis obscure memoravit.'* It has been thought by some that he did not wish to express himself clearly lest his views, being opposed to the religious ideas of the time, call down persecution upon him. But in the fragments of his writings that have come down to us he is singularly outspoken. And while his obscurity is often alluded to by the ancients, he is never charged by them with intent to be obscure. Lucretius, indeed, rather pays him a compliment by implying that he is difficult to understand only to the 'light-minded' Greeks. Like the old man in Wordsworth, he coined his thought in "phrase above the reach Of ordinary men." **640. quamde**: archaic for *quam* 'than,' formed by adding the particle *-de* found in *un-de, in-de*, and the like. *Quamde* is also found twice in the fragments of Ennius, and once in Naevius. **642. inv. . . . verb.**: *invertere verba* sometimes means to use words in unusual or wrong sense. Here more likely the reference is to the arrangement; 'involved language.' **643. vera**: 'as true'; supply *ea.* — **bel. tang.**: 'prettily to tickle.' **644. fucata**: 'varnished over.' These lines suggest the Vill[illegible], whose

"Words of learned length and thundering sound
Amazed the gazing rustics ranged around."

Like Lucr., the author of the 'Système de la Nature' complains that "men ever prefer the marvellous to the simple, what they do not understand to what they can understand." The whole passage is quoted by Lange, 'Hist. of Mat.' ii. 119. Munro thinks that the poet here is aiming directly at the Stoics under the term *stolidi*, retorting "upon them their own term of reproach."

647. **denserier**: see n. to 395. 648. **rarefieri**: Lucr. uses four compounds of *facere* not found elsewhere, all admirably adapted to his subject; 3, 906 *cinefactum*; 6, 353 *confervefacit*; 6, 1005 and 1017 *vacefit*; *rarefacere* here and 2, 1143; 3, 442; 6, 233 and 870. 649. **super**: 'moreover': *si partes ignis eandem naturam quam totus ignis habet, super haberent.* 650-1. On the assumption that the heavier elements were made out of fire by condensation, the lighter by rarefaction, the argument is unanswerable. But it applies to the Stoics, not to Heraclitus; for he taught that the process of change is transmutation of substance, something entirely different. See n. to 638 above. 651. **disque sup.**: tmesis. 653. **nedum**: 'much the less'; *nedum* is properly a final conj., 'while not.' According to Roby (§ 1658) the usage here "arises from the prevention of the occurrence of the greater event being rhetorically regarded as the purpose of the occurrence of the less event." — **variantia**: = *varietas*; found only here and 3, 318; probably used because *vărĭĕtas* would not suit the metre. 655. **id**: perhaps acc. like *quod genus*; or it may be that *accedat* or the like should be supplied. — **faciant**: 'suppose,' 'assume,' a common meaning of *facere*, especially in philosophical writings; the acc. with infin. usually follows. The unexpressed subject of *fac.* of course refers to the philosophers who held that fire was the primitive matter. 656. **poterunt**: see n. on 572 *poterit.* 657. **nasci**: Munro's emend. for *muse* and *mu* of MSS. Lachm. reads *adesse.* 659. **vera viai**: see n. to 86; *viai* goes with *ardua* as well as *vera.* 660. **exempt. re. in.**: supplies the place of a conditional clause. The reasoning is akin to that in 335 *et seq.* 663. **aestifer**: first found in Cicero's Aratea 111 (352), whence our poet likely took it. — **uti**: 'in the way that.' 665. **potesse**: earlier form of *posse*, but already archaic in the time of Lucr. 666. **ignis**: acc. pl. — **stingui**: see n. to 486. 667. **id**: [illegible]., *cre*[illegible]

ignis potesse etc Like the English do this *id facere* often takes the place of a clause. The reasoning in 665–9 seems to be: In no other way than through void can rarefaction and condensation of fire take place; but void these philosophers utterly reject; so then their notion of a primitive fire-essence is exploded, and they must fall back to the position that all things existent are produced from nothing.

670–1. These lines are repeated 1, 792–3; 2, 753–4; 3, 519–520, to emphasize the doctrine that each thing has a limited power, a circumscribed sphere of existence, outside of which change of form and destruction will meet it. See n. to 76. **672. proinde**: in Lucr. usually scanned as a dissyllable; 'hence,' 'therefore.' — **aliquit**: see n. to 469 *aliut*. — **ollis**: archaic for *illis;* common in Lucr. The root is *ol-* as in *olim*. **673. tibi**: ethical dat., frequent in Lucr. In English the pronouns of the first and second persons are thus used often by the earlier, sometimes even by the later writers. Cf. Shakspere, 'King Henry Fourth,' Part I, 4, 3, "Cut me off the heads Of all the favorites;" Carlyle, 'Frederick the Great,' Bk. 2, ch. 11 "A terrible dragon of a woman. . . . claps you an iron cap on her head, and takes the field where need is." For full discussion see Maetzner, 'English Grammar,' Am. edit. ii. 211.

676–7. Cf. the words of Epicurus in Diog. Laert. 10, 24, 54: 'In the dissolution of combined bodies of necessity there remains something solid and indestructible, which will not undergo change into the non-existent nor from it. Changes, however, it will undergo, in most cases by mutation of parts, but in some by the coming and going of atoms [. . . ἀλλὰ κατὰ μεταθέσεις ἐν πολλοῖς· ἐπὶ τινῶν δέ, κατὰ προσόδους καὶ ἀφόδους]. **678. conv. corp. sese**: a kind of middle use, not uncommon in Latin; trans. as passive. A similar idiom is very frequent in the French and German reflexive verbs. **683. crearent**: for subject refer back to 679 *haec ignea corpora*. **684. ita.**: here as often looks forward to that which follows. **685. concursus**: see n. to 633–4: *ordo*, arrangement of atoms in the mass; *positura*, position, relative to other atoms; *figurae*, 'shapes,' fully discussed 2, 333–580. [illegible] **naturam**: i.e. of things, not of atoms, because these are incapa[illegible]f change. **688–9**. These lines refer to the Epicurean theory [illegible]e-perception, that from the surfaces of things there [illegible]n off thin films of matter that strike upon [illegible]t excite sensation. For fuller discus[illegible] **688. rei**: scanned *rēī;* cf.

2, 236. The original quantity of the *e* was doubtless long; but in the later poets it is generally short Cf. n. on 3, 918 *rē̆ī*.

That all things are of fire combats the evidence of the senses, which is to be accepted as final. 690–704.

692. hic idem: i.e., Heraclitus. — **perdelirum**. The Stoics and the Epicureans, but particularly the latter, were famous for abuse of opponents and their views: see Cic. N. D. 1, §§ 93–4. In this respect Lucr. stands in marked contrast to most of his school, for he generally speaks of those whom he is refuting with moderation and courtesy. Philosophers of to-day, however, should not be hasty in criticising the narrow spirit of ancient thinkers. Büchner (preface to 'Kraft und Stoff') alludes to his opponents as 'yelping curs,' 'mental slaves,' 'a howling pack'; and even Tyndall, generally so fairminded, speaks of 'brawler' and 'clown.' Cf. Wainwright 'Scientific Sophisms,' ch. 1; Elam, 'Winds of Doctrine,' p. 132. **693. ab**: 'from the side of,' i.e., 'on the side of'; see Roby, 1813. To be consistent with his doctrine of perpetual change, Heraclitus had to discredit the evidence of the senses, which show us many things apparently firm and changeless. See Zeller, 'Prae-Soc. Phil.' ii. 88. **695. ignem**: attracted to the acc. from its proper constr. as nom. to *cogn. est.* — **ipsi**: *Heraclito*. **696–7.** Fire he thought to be "the only sensible phenomenon in which the substance of things displays itself, according to its true nature." **699–700.** That the senses never deceive was a cardinal tenet of the Epicurean theory of knowledge; see 4, 378–521 and Introd. Thorough-going materialists in all ages, while boasting of the certainty of their systems as founded upon the evidence of the senses, have been prone to forget that the atom, which lies at the foundation, is entirely beyond the ken of sense; and thus the whole superstructure of asserted truth remains but a hypothesis incapable of verification. They should be last, therefore, to criticise those who build on something independent of the senses or even opposed to them. Cf. 483–502; 599 *et seq.* **700. qui**: indecl. abl. here = *quo*, having as antecedent *quid*. This form is found also in *quicum*, and may be used of either number and all three genders. From it came *qui-n*, *qui-pe* (*quippe*) and the like. **703. neget**: subj. of result; with *quam* the *ut* is often omitted. A. 332, *b.*; H. 502, 2. Ample illustration of the usage is given by Draeger, 'Hist. Syntax der Lat. Sprache,' ii. § 520, 2.

Nor can air or water or earth be taken as the primitive matter. 705–711.

707. **principium**: see n. on 1, 55 *primordia.* — **aëra**: the acc. of *aër* generally has the Greek form, but *aërem* is found a few times; so the acc. of *aether* is *aethera*, rarely *aetherem.* Anaximenes and Diogenes of Apollonia were the two principal philosophers who taught that air is the single primal element. For full discussion, with citations from original authorities, see Zeller, 'Prae-Soc. Phil.' vol. i. 708. **umorem**: that water is the ultimate matter was the teaching of Thales and Hippo. See Zeller ut sup., or Ritter, 'Hist. of Anc. Phil.' vol. i. 709. **terram**: Aristotle (Met. 1, 8 — a chapter in which the doctrine of a single material cause is ably criticised) states that none of the philosophers took earth alone to be the primal substrate; but this view has been sometimes attributed to the poet Pherecydes, and even to Xenophanes. See Zeller, ut sup. i. 567–8. 710. **vertier**: = *verti.* 711. **derrasse**: see n. on 43 *desse.* For the thought cf. 637 above.

2. Nor is matter made up of two or four primal elements combined. 712–829.

713. **aëra iun.** etc.: no philosopher of prominence took either air and fire, or water and earth as the true primitive elements; but the former view is assigned to Oenopides of Chius, the latter sometimes erroneously to Xenophanes; see ref. on 708. 715. **anima**: for *aëre*; cf. Cic. Tusc. Disp. 1, 26, 65 *si deus aut anima aut ignis est, idem est animus;* but this use of *an.* is rare in prose. — **imbri**: poet. for *aqua.* The abl. more often ends in *e.* 716. **Empedocles**: one of the most important of the prae-Socratic philosophers, b. at Agrigentum probably in the first decade of the fifth cent. B.C. In his lifetime he was regarded not merely as a philosopher but also as a seer and prophet, and seems to have welcomed the veneration of the masses, who looked on him with deepest awe. He taught that there are four primal elements, air, fire, water, and earth; but to the material causes he added two quasi-spiritual ones, love and strife (see n. on 31). These agencies alternately acting upon the four kinds of matter cause combination and dissolution. At first, through the influence of love, there was perfect union of the elements. Then strife gradually brought about a complete separation. But by love a partial combination was

accomplished, which, through a process of development, resulted in the present universe. Opinions as to the value of Empedocles' system were in antiquity very diverse; and so they remain to-day. From him Lucr. received many suggestions, even taking his poem Περὶ Φύσεως as a model (see n. to 25). To the likeness of his views to those of the Atomists and Epicureans the fulsome praise here is due. But Plato, Aristotle, and especially the Neo-Platonists, held Emp. in much less esteem. From the evidence collected by Zeller ('Prae-Soc. Phil.' vol. ii.) the significance of his speculations seems to lie in three things: (1) He was the first to introduce into philosophy the conception of a moving cause independent of matter, — in this foreshadowing Anaxagoras, who assumed an intelligent cause, Νοῦς, Mind. (2) He brought into natural science the conception of primitive elements (as opposed to a single form of matter). He fixed the number at four, a number which, after his time, was generally accepted in antiquity, and lingered till modern chemistry by experiment laid the foundation for a correct theory. Thus he became, along with Leucippus, "the founder of the mechanical explanation of the universe." (3) In explaining the development of animal life he taught a crude form of evolution. Zeller calls him "the earliest precursor of Darwin." Consult Ritter, 'Hist. of Anc. Phil.' vol. i.; Butler, 'Lectures on the Hist. of Anc. Phil.', 1st series. 717. **triquetris**: Sicily was often characterized from its peculiar shape by Greeks and Latins alike.

718. **aeq. Ion.**: Several of the earlier Greek writers use the term Ionian Gulf (Ἰόνιος κόλπος) as synonymous with Adriatic. The later geographers considered the Ionian Sea as extending along the south coast of Italy, including the entrance of the Adriatic, and reaching on the one hand as far as Greece, on the other to Sicily. The Latin writers, generally, use the term in this latter sense. See Smith, 'Dict. of Geog.' art. *Ionium Mare*. 719. **glaucis**: Greek γλαυκός. The first conception of the word was that of 'flaming,' 'bright.' But later it referred to color, usually a shade of olive-green. Trans. 'green.'— **virus**: 'brine'; so 2, 476; 5, 269; 6, 635. *Virus* is once applied to stench, 2, 853. 721. **eius**: i.e. *Siciliae*. 722. **Charybdis**: to the small craft and poor art of ancient sailors this whirlpool seems to have furnished just grounds of alarm. The Homeric poems indicate a most exaggerated conception of its perils; and it continued a bugbear to seamen till comparatively recent times. To-day the traveller finds in it only a vortex (just outside the Straits of Messina) pro-



duced by the meeting of currents and fraught with little danger. The epithet *vasta,* Munro remarks, "implies that in which nothing lives." 723. **flammarum** : after *iras*. 726. **videtur** : 'is seen.' 728. **opima** : the fertility of Sicily was proverbial. It was famous for both the fineness of its stock and the variety of its fruits. By some it was thought to be the native country of wheat; and after the decline of Italian farming it became one of the principal sources of the Roman grain supply. 729. **viro** : Empedocles. 731. **carmina** : all the writings of Emped. that we know of were in verse. Fragments of only two poems are extant, the Περὶ Φύσεως, 'On Nature,' and the Καθαρμοί, 'Purifications.' The style was animated, remarkable for its clearness and the beauty of its descriptions. Aristotle called Emped. Homeric. — **pectoris** : see n. to 3, 140. 732. **vociferantur** etc. : with the thought cf. Cic. De Am. 7, 24, *Agrigentinum quidem doctum quendam virum carminibus Graecis vaticinatum ferunt* etc. — **reperta** : see n. to 136.

Against those who assume one or more primal elements Lucr. urges, first, that they admit no void, yet assume motion and differences of density; second, that they suppose matter infinitely divisible; third, that they make out the first-beginnings to be soft; fourth, that the primal elements assumed would not harmonize or unite at all. 734–762.

734. **supra quos** : see 705 *et seq.* and nn. 735. **egregie** : 'very'; with *multis*. 739. **Pythia** : for *Pythia sacerdos* (as in Greek ἡ Πυθία for ἡ Πυθία ἱέρεια), the priestess of the Pythian Apollo at Delphi. — **quae** : the antecedent is not *responsa*, as some make it, but *Pythia*, with which *dat* is to be supplied. — **lauro** : sacred to Apollo because of its connection with Daphne, whom the god once loved; as he pursued her, mother earth opened to receive the maid; and then, to console him, produced the bay-tree. Ovid, however, in the Metamorphoses represents Daphne as herself turned into a laurel-tree. Those who came to the temple at Delphi as suppliants wore wreaths of laurel. Before ascending the tripod the priestess burned bay-leaves on the altar; and when seated she was surrounded by wreaths of them, the smell of which, Munro remarks, was thought "to increase the prophetic afflatus excited by the cold air which came out of the deep cleft." 740. **tamen** : repeated from 734; 'Yet in first-beginnings of things they have gone to ruin.' On *prīncĭpĭīs* for *prīmōrdĭīs*, see n. to 55. 741. Cf. Hor. 2, 10, 9–13 :

saepius ventis agitatur ingens
pinus, et celsae graviore casu
decidunt turres, feriuntque summos
fulgura montes.

742–5. For Lucretius' proof of the impossibility of motion and degrees of density without void, see above 329–397. 744. **frugis**, 'crops.' 745. **in . . . corpus**: a rare constr., having a slightly different meaning from *in corpore*. The acc. with *in* here carries out the idea of *ad-* in the verb, that of something from without added to the mass and mingled with it, into it. 747. **faciunt**: see n. to 655. — **pausam**: here = *finem*; not found in classical Latin. — **stare**: for *esse*. Draeger, 'Hist. Syntax,' Einl. p. xiii. mentions this use of *stare* by Lucr. as an archaism. For the argument cf. 528 *et seq.* 748. **prorsum**: 'at all.' 749. **cum**: concessive. For the thought see 599 *et seq.* and nn. 751. **conicere** etc.: 'infer . . . that because the things which you do not see have a bounding point, there is a least in them.' *quod* in 752 is a conjunction. 754. **constituunt**: has the same subj. as 743 *constituunt* and 740 *fecere*. — **nativa**: 'born,' 'having birth,' not limited to living things, but used in general of that which has come into being, which has not existed from infinite past time; *mortali* of course refers to that which is destined to die. The two words are often used by Lucr. in the same connection, completely defining a limited as distinguished from an eternal existence. Empedocles taught that the four elements were underived and imperishable. 755. **cum**: somewhat pleonastic: see n. to 347. — **utqui**: this is the reading of the MSS., but was rejected by editors previous to Munro for *atqui*, and *usque* (Lachmann), both of which do violence to the thought. In *utqui* Munro thinks that the *qui* is an affirmative particle, which has the same force as the *qui* in *atqui* and in *quippe qui* in places where *qui* cannot be a relative, viz. 'Yes that,' or the like. It is probable that, owing to a misunderstanding of the word, *atqui* and other forms stand in our texts in several places where *utqui* should be read. 758. **quid**: adv. acc. of extent, 'how far.' — **habebis**: 'you will be able.' 761. **tempestate**: see n. to 178.

In the constant change back and forth the four primal elements cannot be called the first-beginnings of things any more than things the first-beginnings of the primal elements. Between such elements, moreover, there



could be no union in which their several natures would not appear; but first-beginnings must be without sensible properties. 763–781.

766. **quam** etc.: the full constr. would be *quam contra* (adv.) *res primordia illorum* (i.e. *quattuor rerum*, see *quat. ex reb.* 763) *dici queant.* — **retr. put.**: 'and the supposition be reversed.' 767. **alternis**: 'alternately'; see n. to 524. 769. **temp. ab omni**: i.e., from every point of time, 'ever,' 'continually.' 771. **aërias auras**: =*aëris auras* in 783, both for *aër.* In many cases it was simply a matter of choice whether the attributive be expressed by an adj. or a substantive in the gen.; so *regius* or *regis; patrius, paternus,* or *patris* etc. — **ror. liq.**: see n. to 307, 281. 772. **eorum**: after *nil.* — **concilio**: see n. to 484. 773. **tibi**: see n. to 673. 774. **animans**: supply *res;* as also with *exan. cum corp.* — **arbos**: archaic for *arbor; s* final or between two vowels was generally changed to *r.* Lucr. has also *colos* (6, 208 and 1074), and *vapos* (6, 952). 775–8. For the argument cf. below 880 *et seq.* 778–81. The ultimate matter ought to exist in individual things without revealing properties of its own. For full discussion see 2, 915 *et seq.* 781. **esse . . . proprie**: i.e., to exist in distinct individuality, 'itself by itself,' without being affected by contact with anything else.

They assume constant change in the four elements from one to the other; but this would not be possible unless there were in them unchangeable first-beginnings, by the different arrangements of which the different elements may be produced. 782–802.

782. **repet. a**: 'they go back to start from.' 784. **hinc**: =*ex his. hinc* is often used like *unde*, for which see n. on 56. — **imbri**: see n. on 715. 785. **retro**: 'in reverse order.' In illustration of the argument Munro quotes the Stoic view from Cic. N. D. 2, 33, 84 *cum quattuor sint genera corporum, vicissitudine eorum mundi continuata natura est. nam ex terra aqua, ex aqua oritur aër, ex aëre aether; deinde retrorsum vicissim ex aethere aër, inde aqua, ex aqua terra infima. sic naturis his, ex quibus omnia constant, sursus deorsus ultro citro commeantibus mundi partium coniunctio continetur.* 788. **mundi**: here =*caeli*, a not infrequent use. 790–1. Cf. 672–3. 792–3. Cf. 670–1 and n. 794. **quae**: i.e., *ignis, aër, umor, terra.* 795. **commutatum**: =*commutationem;* found only here. 797. This



line is found also 1, 673 (where see n.); 2, 756; 2, 864. 798 **quin pot.**: 'why not rather.'

But, you say, air, earth, water, heat are needful for production and growth of things. Quite true, and further, we cannot live without food and drink. But the reason in both cases lies in this, that there are many first-beginnings common to many things, which by changes in arrangement produce the most unlike results, as the same letters in different words. 803–829.

803. **At**: = ἀλλὰ γάρ, 'But,' emphatic. *At* is frequently thus used to introduce an objection of a real or imaginary opponent. 805. **tempestas**: see n. to 178. The weather by its showers furnishes water; the sun gives heat as the form of fire adapted to production and growth. 806. **tabe**: refers to the dissolving of clouds into water. 809. **scilicet**: 'very true'; the poet replies to the objection: *scil.* is often used independently to express an admission of the preceding statement. 810. **adiuvet**: 'recruit.' 812. **dubio procul**: 'beyond doubt.' In this and similar phrases *procul* (from *procel-lere*) seems to have gone from its adverbial over to a prepositional use. Cf. 2, 261; 3, 638; 5, 258; Hor. Ep. 2, 1 *procul negotiis*. Roby, § 2068, gives a number of examples. 814–5. Observe the concurrence of *m*-sounds. 815. **rerum**: *communis* is followed by gen. or dat. without perceptible difference of meaning. Cf. below 824. 817–8. Cf. 908–910; 2, 760–3; 2, 1007–9; 2, 883–5. 817. **magni ref.**: 'it makes great difference.' 822. 'but they are mixed up with different things and in different ways as they move.'

823–6. A favorite illustration of Lucr.; cf. 197; 912; 2, 688–691; 2, 1013–4. Its force becomes apparent when it is considered that the twenty-four letters of the Roman alphabet could be arranged in 620,448,401,733,239,439,360,000 different combinations. Against the doctrine of a universe without a God the argument has often been employed, from Aristotle down to the present, that a chance casting of the letters of the Greek alphabet forever would never produce a single line of the Iliad. Infinitely fewer would be the chances that atoms in infinite space, without directing power, would meet in such a way as to produce a world; fewer still the chances that the world thus produced could endure for a single moment of time. The argument is not so conclusive, however, as it seems; for by the logic of

probabilities it may be shown that, with the requisite number of throws of the letters, any verse of the Iliad will be not only a possible, but even a necessary result. For it is a possible combination, inasmuch as it already exists; in the shifting of letters, in infinite time, all possible combinations will appear. The universe, likewise, is a possible combination, for it exists. Granted an infinite number of atoms moving in infinite space through infinite time; all possible combinations, of which this universe is one, must result; further, in the numberless combinations it might be an accident of this world-combination that, by a balancing of forces owing to a union of atoms moving in different directions, it might endure for a time; it is known, too, that this universe, at least the part with which we are familiar, is undergoing gradual change, — is then in its present form by no means permanent. But even granting to materialists that by a chance swirl of atoms during infinite time the universe as it stands could come into existence; they are not a whit less dependent on a Final Cause. Whence did the atoms get their shapes, so that it is possible for them to combine? Whence did they receive the impulse of motion, which must be postulated in order to bring about any result whatever? — for dead matter cannot move itself. As the Stoic, Manilius, put it (Astron. i. 490–1): —

> quis credat tantas operum sine numine moles
> ex minimis, caecoque creatum foedere mundum?

The modern reasoner of materialistic tendencies, however, takes refuge in Agnosticism. Thus, Tyndall says ('Frag. of Sci.' p. 421): "If you ask him (the materialist) whence is this 'Matter' of which we have been discoursing, who or what divided it into molecules, who or what impressed upon them this necessity of running into organic forms, — he has no answer." But there must be some one to cast the letters the requisite number of times before the verse of the Iliad can appear; so there must be some power to set whirling through immensity those atoms which, in infinite time, passing into all possible combinations, might have produced this one. See nn. to 150; 1021; consult Janet, 'Final Causes, Bk. 2, ch. 1. **826. son. sonanti**: 'sound wherewith they sound.' **827. queunt**; see n. to 586. **828. plura**: i.e., more combinations.

3. Nor is matter made up of a number of homogeneous primitive elements. 830–920.

The view of Anaxagoras, also, is open to objections; first, in that it assumes an indefinite number of primitive elements, and denies the existence of void or of any limit to the divisibility of matter. 830–846.

830. **Anaxagorae**: b. at Clazomenae, about 500 B.C. Anaxagoras taught that there is an indefinite number of primitive substances, qualitatively different, corresponding to all the various kinds of matter. Thus, flesh is made up of minute particles of flesh, bone of particles of bone, gold of gold, and so forth. These particles are underived and indestructible. They are not, however, atoms, for they are infinitely divisible. The four elements he thought to be merely a mixture of all kinds of primitive particles; their "apparent simpleness he explains by saying that, on account of the amalgamation of all possible determinate substances, not one of these is perceived in its distinctive individuality, but only that is perceived in which they all agree." To explain the union of these in living bodies, and the creation and on-going of the universe, Anaxagoras taught the existence of a **Νοῦς**, an incorporeal, intelligent Force, acting upon matter from without. He was the first who grasped at the idea of essential difference between matter and spirit; at the conception also of an intelligent Final Cause. It is an error, however, to suppose that Anaxagoras believed in the **Νοῦς** as a personality, as an infinite, all-perfect God. See Zeller, 'Prae-Soc. Phil.' vol. ii. — **homoeomerian**: = ὁμοιομέρειαν, and so written in some MSS. and older edit.; 'homoeomerīa.' Anax. called his primitive particles σπέρματα 'seeds' or χρήματα 'things'; ὁμοιομερῆ 'of like parts' does not occur in the fragments of Anax. extant, but is first found in Aristotle; whether it or ὁμοιομέρεια was used by Anax. is an open question. The latter term is first met with in this passage, and seems to denote "the relation which existed between the things in being and the particles, like in kind, of which they were composed," as suggesting the doctrine of simple substances composed of parts infinitely small. In later Greek writers αἱ ὁμοιομέρειαι is used in describing the system of Anax., as by Diog. Laert. 2, 8 οὗτος ἔλεγε . . . ἀρχὰς δὲ τὰς ὁμοιομερείας· καθάπερ γὰρ ἐκ τῶν ψηγμάτων λεγομένων τὸ χρυσὸν συνεστάναι, οὕτως

ἐκ τῶν ὁμοιομερῶν μικρῶν σωμάτων τὸ πᾶν συγκεκρίσθαι. Other examples are cited by Zeller, *ut sup.* p. 334–5. **834. quom**: anticlassical form of *cum*, indicating its derivation from the pronominal root KVA, Lat. *qui;* probably an old accusative. *cum* is the more common form in the MSS. of Lucretius; *quom*, in those of Plautus and Terence. **836. hic**: i.e., Anaxagoras; subject of *putat* below. **837. viscus**: the singular is rare; it occurs again 3, 719; 3, 266. Neue gives other passages where it is found, 'Formenlehre,' i. 447–8. — **sanguen**: = *sanguinem;* a neuter form was developed by the side of the masc., but went out of use in the classical period. **843.** Anax. taught that by the mixture of different kinds of substances there is made up a universe without void. **844.** See n. to 830. **846. illi**: Empedocles etc.; see 734 *et seq.*

Again, in that he assumes soft first-beginnings, which would soon perish. 847–858.

848. si . . . sunt: 'if (those really) are first-beginnings.' **849. sunt**: for *constant.* After *atque* or *ac* expressing comparison, 'than,' 'as,' the verb is usually omitted. Cf. 846 *atque illi.* **850.** Anax., however, held that the particles, though divisible to infinity, were imperishable. **852. leti** etc.: cf. the Eng. expression, 'in the very jaws of death.' **855. manifesta**: = φαινόμενα in its philosophical use, 'evident to the senses.' So 2, 867; 3, 353; and in other places. *manif.* in the ordinary signification occurs below 893. **856. ex**: 'before.' **857 reccidere**: see n. on 228 *redducit.* Here the *d* of *red* was assimilated to the following *c*. In classical Latin, generally, one *c* was dropped and the *e* made short. **858. ante**: 150–264.

Furthermore, since food causes the body to increase, blood, bone, and other parts of the body must be composed of things different in kind; or, if it is supposed that from food, bones, blood, and sinews take up particles of like nature with themselves, then food must be made up of particles different in kind; the same reasoning applies to the products of the earth, and to other things. 859–874.

860. scire licet: frequent in Lucr.; 'you are to know.' After 860 doubtless a line has been lost. Lambinus thus supplies its place, well continuing the argument: —

et nervos alienigenis ex partibus esse.

863. ossa : i.e., *corpora parva*, or *corpuscula, ossium*. — **partis** : i.e., *particulas*. **864**. **liquor** : for *liquidus* (*cibus*). **865. alienigenis** : 'different in kind,' 'foreign in kind,' the opposite, as Munro remarks, to ὁμοιομερής. The argument is, that food does not consist of minute particles of like nature with itself, as the doctrine of Anax. requires, but of particles of blood, bone, etc., things foreign to it in kind. And likewise the earth is composed not of minute portions of earth, but of particles that go to make up all the things that grow out of it. So again in wood flame-particles lurk. **868. terris** : the pl. brings out the idea of 'parts' or 'portions of earth'; 'earths.' **870. transfer** : imper. for protasis of cond. sentence, 'apply' (i.e. if you apply) the same reasoning. **873-4**. These lines, as they stand, are meaningless. Lachmann reads 874

> ex alienigenis, quae alienigenis oriuntur,

which is not at all clear; Munro supposes that after 873 there is a break, which he thus bridges over, simply adding *his* to 874 as it stands in the MSS:

> ex alienigenis quae tellure exoriuntur.
> sic itidem quae ligna emittunt corpora, aluntur
> ex alienigenis, quae lignis his oriuntur.

This, at least, makes good sense and completes the argument.

But Anaxagoras assumes that while in things all sorts of substances are mingled, only that becomes apparent of which the particles are most numerous and conspicuous; the others, as it were, lie hid. Quite wrong. For, on this supposition, when things are crushed, minute particles of different substances ought to appear. 875-896.

875. 'Here some slight opportunity is given for evasion.' — **tenvis** : a dissyllable, as often in poetry. **878. plurima** : supply *corpora parva* or *corpuscula*. **881. conveniebat** : trans. as if subj.; so 884 *decebat*. A. 311, *c*; G. 246, Rem. 1; H. 476, 4. **883. aliquid** : supply *eorum*. **885. lapidi** : abl. **886. latices** : i.e., "the waters that the sheep drink." **887**. Lachmann, followed by Munro, thus explains the constr.: *dulces guttas mittere* (*tales*) *quali oves sunt ubere lactis*; "*ubere* is briefly said for *sapore uberis*." **892. praefr. forent** : observe the subj., while above in 882 *franguntur* and 885

terimus are in the indic. **895. multimodis**: adv. for *multis modis*, the more common expression; from *multi' modis*.

But, you say, trees produce flame by rubbing together. Yes, but not because there is fire stored up in them; rather because different things have the same first-beginnings in common, which combined in one way produce wood, in another way, fire. 897–920.

897 *et seq.* See n. to 5, 1096. — **At**: as in 802, where see n. **900. flam. flore**: edd. compare the Greek πυρὸς ἄνθος, first found in the Iliad. **901. scilicet**: see n. to 809. Here the *scil.* concedes a statement to which exception is taken. **904.** 'But if the flame were stored up ready-made in the forests.' **908–10.** Cf. 817–9. **912–14.** See n. to 823. **914. lig. atq. ig.**: i.e., the letters of *ligna* and *ignes* with slight change being the same. — **dist. voce**: by 'different terms.' **915. apertis**: like *manifesta* in phil. sense (see n. to 855), 'evident to the senses,' with special reference to the sense of sight; 'visible,' opposed to *caecis*, 'hidden.' **917. consimili**: i.e., like to the things that are made up of the particles (*corpora*). **919–20.** If things are made up of particles in nature like themselves, then there must be particles exactly like man in every respect. Cf. 2, 973–990. The thought suggests the Monadology of Leibnitz. Lucr. is fond of closing an argument by an application or illustration the absurdity of which is obvious. In pressing home his point he sometimes, as here, does violence to his opponent's teaching.

The poet pauses in the unfolding of his argument to tell the glad inspiration of his theme, that bids him tread new paths and seek new wreaths in trying to free men's souls from religion's close bonds, and to reveal true reason under the charm of verse. 921–950.

921 *et seq.* The poet has laid down the fundamental principles of his own system, and shown the inadequacy of those adopted by others Before proceeding to expound his doctrine in detail, he gives the poetic spirit play in this noble passage, which forms a graceful and appropriate transition from the general to the special portions of his subject. With these lines Macrobius (Sat. 6, 2, 3) compares Verg. Georg. 3, 289–294; Munro comp. Hor. Sat. 2, 4, 84; Ep. 1, 19, 21 *et seq.*; Manil. 1, 4–6. 926–950 are repeated, with slight change, at the beginning of book 4. **921. Nunc age**: see n. to 265. **922. animi**:

see n. to 136. **923. thyrso**: the poet speaks of himself under the imagery of one at the Bacchic festival roused to inspired frenzy by the touch of the wreath-girt spear or pole the devotees of the wine-god carried. — **laudis spes**: in antiquity, desire of praise was reckoned a chief and proper motive of conduct. Several ancient writers speak of it as a ruling power in directing the lives of the greatest men; Cicero, in particular, confesses his own love of glory; and in several places emphasizes the common argument for the immortality of the soul, that the dead continue to exert an active influence on the living in order to keep alive their fame. Cf. n. to 412-7. **924. mi**: for *mihi*. **925. instinctus**: 'inspired'; often used with reference to a divine influence. Cf. Quin. 12, 10, 24 *instinctis divino spiritu vatibus*. **926. Pieridum**: i.e., the Muses. Some say this name was given them from Pierus, an early king of Thrace, who went to Boeotia and there established their worship. More likely, however, it comes from Pieria, the name of a region at the foot of Mt. Olympus, in which the birthplace of Orpheus and the muses was said to have been. See Hes. Theog. 53; Apol. Argonautica, 1, 23. **927. solo**: 'sole' of the foot. Sellar ('Rom. Poets of the Rep.' p. 289) aptly compares with this passage Milton, 'Par. Lost,' Invocation:—

> "I thence
> Invoke thy aid to my adventurous song,
> That with no middle flight intends to soar
> Above the Aonian mount, while it pursues
> Things unattempted yet in prose and rhyme."

— **integ. font.**: cf. Hor. Od. 1, 26, 6 *O quae fontibus integris Gaudes*. **928-930.** In like manner Horace tells of how he brought new honors to the Latin tongue, and glory to himself, by introducing the Greek measures; and Cicero, more than once, speaks of his mission as the first expounder of the Greek philosophy to his fellow-countrymen. Perhaps these lines suggested Hor. Od. 1, 7, 5-7:—

> sunt, quibus unum opus est intactae Palladis urbem
> carmine perpetuo celebrare et
> undique decerptam fronti praeponere olivam.

932. Part of this line is quoted by Lactantius (De Ver. Sap. 4, 28) to sustain his derivation of *religio* from *religare*, in opposition to the derivation given by Cicero (N. D. 2, 28, 72) from *relegere*. Lact. seems to found an argument on the connection of *religionum* with

nodis, implying in *rel.* the idea of 'binding.' Modern scholars are not agreed upon the origin of this word; the majority follow Lact., whose position was sustained by St. Augustine. But see Vaniček, 'Etymol. Wörterb.' pp. 829, 936 *et seq.* **936.** Cf. Hor. Sat. 1, 1, 25 *ut pueris olim dant crustula blandi Doctores, elementa velint ut discere prima.* **absinthia**: the Romans made much use of wormwood as a medicine; Pliny (N. H. 27, 7, 28) gives forty-eight cases in which it was taken or applied as a remedy. A preparation of it with water was used as a beverage, just as vermouth in Italy and absinthe in France to-day. **940. lab. ten.**: the gen. with *tenus* was the earlier, although in classical Latin it is the more rare constr. It probably grew out of the original use of *tenus* as an acc. of extent. **941. absinthi**: for the form see n. to 11 *favoni.* — **dec. non cap.**: 'though beguiled yet not be betrayed'; an oxymoron, or seeming contradiction, peculiarly forcible from the close resemblance of the words in sound. **944.** Munro makes *tristior* = *amarior*; and *quibus* = *iis a quibus* by attraction, for after the pass. Lucr. does not use the dat. of the agent. **945. volg. abhor.**: the common folk of Rome never gave up their belief in the gods of their fathers. Cf. n. to 250; 81 *inpia.* But here, probably, the poet means to imply not so much the dismay of the multitude in the presence of doctrines undermining their simple faith as their shrinking back from what was hard to understand. **948. si**: 'to see if,' introduces an indirect question. Cf. Liv. 1, 7, 6 *pergit . . . si forte eo vestigio ferrent.* A. 334, *f*; H. 529, 1, n. 1. **950. naturam rerum**: proleptic, like the scriptural "I know thee who thou art" (Mark 1, 24). Cf. Hor. Od. 4, 14, 7–9. This construction is more common in Greek than in Latin. — **compta**: *comere* in Lucr. means to 'construct,' 'frame.' Cf. 3, 259; 4, 27.

iv. The Extent of the Universe.

Is matter limited in quantity, or void in extent, or not? 951–7.

951–2. See 265–328 and 483–634. **954–5.** See 329 *et seq.*

1. The universe is without limit. 958–987.

The universe is boundless; for there is nothing beyond to limit it. A dart hurled from the confines of the universe without would either be stopped by something or keep on flying; if stopped in its course, the out-

side of the universe is evidently not yet reached; if not stopped, it must go on forever. Again, all things we see are bounded one by another; but the universe there is nothing outside to bound. 958–987.

958. **Omne** etc.: 'the existing universe is bounded in none of its dimensions.' **nul. reg. vi.**: Munro well explains, 'take whichever of the roads through the universe you please, at no point in any of them will you reach its bound.' Cf. Epicurus in Diog. Laert. 10, 24, 41–2: 'And moreover the universe is infinite; for that which is limited has an outside, and the outside is perceived in relation to something else. So that, not having an outside, it has no boundary; and, not having a boundary, it must be infinite and not limited.' The Stoics, following Aristotle, taught that the universe is limited, but that outside of it there is unlimited extent of void space. The question whether or not the universe is finite was one that aroused sharp controversy long after Lucretius' day. Cf. Lucian 'Ikaromenippus, 8 καὶ γὰρ αὖ καὶ αὕτη νεανικὴ αὐτοῖς ἡ μάχη, τοῖς μὲν τέλει τὸ πᾶν περιγράφουσι, τοῖς δὲ ἀτελὲς τοῦτο εἶναι ὑπολαμβάνουσιν. For the view of a modern materialist, cf. Haeckel, 'Nat. Hist. of Creation,' ch. 13 (i. p. 324): "The universe is unlimited and immeasurable in both space and time. Nor can we imagine a beginning or end to the uninterrupted and eternal motion in which all particles of the universe are always engaged. . . . The great laws of the *conservation of force* and the *conservation of matter*, the foundations of our whole conception of motion, admit of no other supposition. The universe, so far as it is cognizable to human capability, appears as a connected chain of material phenomena of motion, necessitating a continual change of forms. Every form, as the temporary result of a multiplicity of phenomena of motion, is as such perishable and of limited duration. But, in the continual change of forms, matter and the motion inseparable from it remain eternal and indestructible." Cf. nn. on 150 and 1021. 961. **videatur**: passive; supply *id.* 962. Cf. the words of the Epicurean speaker in Cic. N. D. 1, 20, 54 . . . *inmensam et interminatam in omnis partis magnitudinem regionum videretis, in quam se iniciens animus et intendens ita late longeque peregrinatur, ut nullam tamen oram ultimi videat, in qua possit insistere.* 964. **habet**: coördinate with *caret*. *fine modoque*, 'end and limit.' 967. **tant. . . . infin.**: 'just as infinite as before.' — **omne**: see n. to 74 971. Suggestive of Verg. Aen. 2, 50 *sic fatus validis ingentem viribus*

hastam . . . Contorsit. **978. fini**: a rare form of the abl. in this word; probably a survival from an old loc. form. **979. foras**: 'forth,' 'forward,' without stopping at all. **983.** 'the room for flight' will always prolong the power of flight. Edd. notice that "this illustration was suggested to Lucr. by the Roman mode of declaring war. In the words of Livy, 1, 32, 12 *fieri solitum ut fetialis hastam . . . ad fines eorum ferret . . . hastam in fines eorum emittebat.* You cannot go outside of the *omne* to fling a spear into a neighbor's bounds." Munro compares a striking illustration of Locke, 'Essay on the Human Understanding,' 2, 13, 21: "I would ask whether, if God placed a man at the extremity of corporeal beings, he could not stretch his hand beyond his body? If he could, then he would put his arm where there was before space without body; and if there he spread his fingers, there would still be space between them without body. If he would not stretch out his hand, it must be because of some external hindrance. . . . I would fain meet with that thinking man that can in his thoughts set any bounds to space."

2. Space is infinite. 988–1007.

If space were not infinite, matter by its own weight long ago would have settled in solid mass in the lowest part, thus rendering motion impossible. 988–1007.

991. ponderibus: weight, according to the Epicureans, was one of the essential properties of the atoms. — **confluxet**: for *confluxisset.* See n. to 233 *consumpse.* **996–1001.** On the eternal downward motion of the atoms see 2, 80–141; cf n. on 1058 *sursum;* Epicurus in Diog. Laert. 10, 24, 43 and 47; Cic. N. D. 1, 20, 54; see also p. xxv. Modern atomists insist on the perpetual movement of atoms, but explain it for the most part by the wave theory. See the quotation from Haeckel n. to 958; cf. Spencer 'Prin. of Psychology,' Pt. 5, ch. 10: "In the minutest visible fragment of matter there are millions of units vibrating with unimaginable speed." . . . In the ether "each complex molecule of matter oscillating as a whole — nay, each separate member of it independently oscillating — causes responsive movements in adjacent ethereal molecules, and these in remoter ones without limit;" and "molecules of each kind are specially affected by molecules of the same kind existing in the farthest regions of space. Units of sodium on which the sunlight falls heat in unison

with their kindred units more than ninety millions of miles off, by which the yellow rays of the sun are produced." Cf. also Id. 'First Prin.' Pt. 2, ch. 5, and the criticism of the same by Guthrie, 'Mr. Spencer's Formula of Evolution.' **1000. inferna**: 'from beneath,' as Munro explains, implying "every kind of motion upwards, whether perpendicularly or obliquely upwards, all of which would have more or less sustaining power in opposition to the inherent downward tendency." **1001. ex infinito**: here refers to space; below 1025 to time. **1004.** Found also 5, 1216. **1006. copia**: i.e., of space.

3. Matter is infinite in quantity. 1008–1051.

Space being infinite in extent, matter is infinite in quantity; otherwise things could never have been formed, or even if produced could not continue in existence. 1008–1051.

1008. rer. sum.: i.e., the universe. For the thought cf. Epicurus in Diog. Laert. 10, 24, 41–2. 'The universe is infinite as regards both the quantity of bodies and the extent of space. For if space were infinite, but bodies of limited number, bodies would nowhere be at rest, but would be borne on and scattered throughout the infinite space, from the lack of anything to sustain them or keep them in place by resistance. But if space were finite and bodies of infinite number, the bodies infinite in number would not have room in which to exist.' **1012–3.** The best authorities agree that there is a lacuna here. Lachmann supposes it to be after 1012; Munro places it after 1013, and thus bridges over the transition from the alternation of matter and void to the infinity of matter:—

> sed spatium supra docui sine fine patere;
> si finita igitur summa esset materiai,
> nec mare etc.

['But void I have already proved to be infinite; therefore, matter must be infinite; for if void were infinite and matter finite] neither sea nor earth nor the glittering quarters of heaven' etc. **1015. sancta**: the word well suits the Epicurean conception of the physical nature of the gods. Cf. Cic. N. D. 1, 17, 45. **1021** *et seq.* The rejection of Final Cause and Creation from Design was a fundamental position of the Epicureans. The question whether, granted an

infinite number of moving atoms, infinite space and infinite time, a universe like the present could or would result, belongs properly to the Calculus of Probabilities. See n. to 823–6; Janet, 'Final Causes, App. x., i.; Burr, 'Doctrine of Evolution,' Second Series,' sect. 6; Charpentier, 'Mémoire sur la logique du probable.' The position of Lucr. is essentially that of modern materialistic evolution, whose "claim is that a cloud of atoms, endowed with definite spheres of attraction and repulsion, is able to work out all the results which seem to us to manifest intelligence and purpose." See Bowne, 'Review of Herbert Spencer,' p. 234; cf. pp. 19–22. Spencer declares that "this transformation of an indefinite, incoherent homogeneity into a definite, coherent heterogeneity, which goes on everywhere until it brings about a reverse transformation, is consequent upon certain simple laws of force." Still more outspoken is Haeckel, 'Nat. Hist. of Creation,' ch. 1 (i. 20): "Whilst, then, we emphatically oppose the vital or teleological view of animate nature, which presents animal and vegetable forms as the productions of a kind Creator, acting for a definite purpose, or of a creative, natural force acting for a definite purpose, we must, on the other hand, decidedly adopt that view of the universe which is called the *mechanical* or *causal*. It no longer occurs to physicists, chemists, mineralogists, or astronomers to seek to find in the phenomena which continually appear before them in their scientific domain the action of a creator acting for a definite purpose. They, universally, and without hesitation, look upon the phenomena which appear in their different departments of study as the necessary and invariable effects of physical and chemical forces which are inherent in matter." Cf. Büchner, 'Kraft und Stoff'; consult Cudworth, 'Intellectual System,' ch. 2, § xxii.; Flint, 'Anti-Theistic Theories,' sect. 4; Lange, 'Hist. of Materialism,' i. 139.
1022. suo: scanned as a monosyllable. Neue gives a number of like examples, 'Formenlehre,' ii. 190. **1025. ex infinito**: 'during infinite time past.' The assumption of infinity of time is as essential to modern as to ancient materialism. "Who knows what might happen in eternity?" **1029. magnos annos**: the poet had in mind the great cycles or cosmic years taught by many of the ancient philosophers, particularly the Pythagoreans, Heraclitus, and the Stoics. The 'great year' of Heraclitus comprised 10,800 or 18,000 solar years (authorities differ); for the Stoic view cf. Zeller, 'Stoics, Ep., and Scep.' ch. 7. **1031. fluminis**: 'running water'; dep. on *undis*.

1033. **summissa gens**: cf. 8. The expression implies the springing of living things from the earth, explained at length 5, 771 *et seq.* 1034. **vivant**: = *durent* by poetic license, Munro thinks. The ancients generally seem to have supposed the heavenly bodies endowed with life. See n. on 5, 523. 1036. **ex infin.**: as in 1001, where see n. 1038. Cf. 194. 1041. **viai**: gen. of separation after *aversa*; a Greek constr. A. 243, *f*, Rem.; H. 410, v. 4. 1043. **quaecumque**: trans. as if *quae*; but *quaecumq.* has a peculiar force, implying that it covers in entirety, altogether, that which it represents. 1044. **enim**: 'indeed,' 'it is true'; beware of always trans. *enim* 'for.' 1044. **part. mor.**: i.e., keep a portion of the sum of matter stable, and thus hinder it from flying apart into space. 1045. **veniant**: the subj. is due to the idea of purpose involved. A. 328; G. 574; H. 519, II. 2.—**queatur**: the passive forms of *queo* and *possum* are occasionally found, in the older writers, with a passive infinitive. Neue, 'Formenl.' ii. 603 and 609, gives a full collection of examples. Cf. 3, 1010 *potestur*. 1046 *et seq.* As the blows are forced to rebound, matter is thus freed from pressure; hence there must be an infinite supply of matter or the universe would fly into pieces. 1050. **et tamen**: the expression is elliptical. The meaning in full is 'and (though what I have said is true) yet.' 1051 **opus est**: predicate, with *vis* as subject. The more common constr. of *opus est* with the abl. is found 1, 206; 5, 1053; 6, 1081.

4. The Universe has no centre. 1052-1113.

There is no centre in the universe toward which all things tend. To suppose that there are antipodes is rank folly; in infinite space there can be no centre, and if there could be, things would not necessarily tend toward it any more than be repelled from it. Further, there can be no place where bodies lose their weight and are able to be sustained by void. 1052-1082.

1052. **Illud**, etc.: see n. to 80.—**fuge**: *fugere* with the infinitive is not uncommon. See Kühner, 'Ausf. Gram.' § 124, 1, *a*). 1053. **medium**: 'centre.' Most of the ancient philosophers taught that the earth is at the centre of the universe. Pythagoras supposed that earth, sun, and the other heavenly bodies move about a central fire. In the following argument the poet, doubtless, intends directly to combat the Stoics, who held that the earth was first formed, the

rest of the universe built around it; and insisted on the unity and perfection of the universe, emphasizing in everything the adaptation of means to end. — **quod**: supply *id*. **1054. mun. nat.** = *mundum*. See n. to 73. **1055.** 'and the uppermost and lowest parts cannot part asunder in any direction.' **1058.** The constr. after *credere*, interrupted by 1057, which is parenthetical, is here resumed. — **sursum**: i.e., from the lower side up toward the common centre. The Epicureans did not realize that in space there can be no up and down. But this error was not by any means universal in antiquity, as is sometimes supposed. Cf. Plato, 'Timaeus' 62, C.: 'It is quite erroneous to suppose that there are two opposite regions in the universe, one above and the other below, and that heavy things naturally tend to the latter place. The heavens are spherical, and everything tends to the centre; and thus a b o v e and b e l o w have no real meaning. If there be a solid globe in the middle, and if a person walk around it, he will become the antipodes to himself, and the direction which is u p at one time will be d o w n at another.' See Whewell, 'Hist. of the Inductive Sciences,' 3 ed. additions to ch. 3; cf. 996–1001 and n. **1059.** 'are at rest on the earth turned upside down'; *posta*, of course, for *posita*. **1060. simulacra**: i.e., the inverted image one sees by looking into still water. **1061–7.** Cf. Cic. Acad. 2, 39, 123 *vos etiam dicitis esse e regione nobis, e contraria parte terrae, qui adversis vestigiis stent contra nostra vestigia, quos ἀντίποδας vocatis;* also Id. Tusc. Dis. 1, 28, 68. The doctrine of antipodes is assigned by Diog. Laert. (8, 26) to Pythagoras; but the same writer elsewhere says (3, 24) that Plato was the first to use the word. Cf. Verg. Georg. 1, 247 *et seq.;* Plin. N. H. 2, 65; Strabo, 15. "The existence of antipodes was, of course, bound up with the doctrine that the universe or the world is a globe (held by Plato and the Stoics); hence the early Christian writers attack the two ideas together as unscriptural." Lactantius, Inst. 3, 23 *Quid illi, qui esse contrarios vestigiis nostris antipodes putant? num aliquid loquuntur? aut est quisquam tam ineptus, qui credat esse homines, quorum vestigia sint superiora quam capita?* etc. St. Augustine (De Civ. Dei 16, 9) is equally severe. As late as 1616, in the pontificate of Paul V., a decree of the Catholic Church ordered that all books teaching the mobility of the earth and the immobility of the sun (a doctrine essentially connected with the preceding) should be 'suspended, forbidden, and condemned.' Consult Whewell, ref. in n. to 1058; Reid's n. to Acad.

2, 123. **1062. caeli**: i.e., opposite to our sky, on the other side of the world. **1063. reccidere**: see n. to 857. **1064. templa**: see n. to 120. **1067. dividere**: supply *illos* (antipodes). **noctes** etc.: not days and nights of equal length, but nights equal to our days. *diebus* is for *dieb. nostris.* **1068–1075.** Lachmann has most acutely shown that these verses stood at the top of p. 45 of the lost MS. from which all the extant MSS. of Lucr. have directly or indirectly come. The right-hand corner of that page being torn off, the lines were left incomplete. They may be read as follows: —

> sed vanus stolidis haec|error somnia finxit
> amplexi quod habent perv|ersa rem ratione.
> nam medium nil esse potest|ubi summa profundist 1070
> infinita. neque omnino, si iam medium sit,
> possit ibi quicquam consistere|eam magis ob rem
> quam quavis alia longe ratione|repelli, etc.

The lines as thus given were completed by different persons; 1068–9, 1072–3 by Munro; 1070 by Lachm.; 1071, 1074 by Marullus; 1075 *debet* by Wakefield for *oportet*, previously supplied. **1068. stolidis**: perhaps the Stoics; see n. to 638. **1077. quisquam**: generally used as a substantive, but here an adj. **1079. ulli subs.**: 'form a support for anything.' With *debet* supply *id* as antecedent of *quod.* **1080. sua** etc.: parenthetical; supply *id;* cf. 1053. 1082. **cuppedine**: Lucretian form for *cupidine;* cf. 4, 1090; 5, 45. The *u* is short by nature, and so scanned outside of Lucr. Trans. 'by desire of a centre.'

Those who assume a centre of the universe suppose that not all bodies, but only the heavier, settle toward it, while the lighter tend to rise. In this they are inconsistent; and on this supposition the world would in a moment dissolve in utter destruction. 1083–1113.

1084. After this verse Munro thinks a vs. has been lost, which he thus supplies: *et quae de supero in terram mittuntur ut imbres.* 1087. Aristotle held that earth and water tend to move toward the centre, air and fire from the centre, while the fifth element, the quintessence, tends to move around the centre. The Stoics held a like doctrine, without the quintessence; but, in accordance with their dynamical view of nature, they taught that all things are

held in their proper place by the world-ordering force, the universal reason. **1090.** See n. to 231 and ref. **1094–1101.** The best MS. leaves a space here for eight lines. The lost vss. are supposed to have come at the top of p. 46 of the original MS. A part of the leaf having p. 45 on one side and p. 46 on the other was torn away; thus vss. 1093–1101 were lost entire, being on a left-hand page, and written nearer the outer edge; while only the ends of vss. 1068–1075, which were on a right-hand page, and nearer the inside, were torn away. The missing lines have been variously supplied. Munro bridges over the chasm in his translation: 'unless from time to time [nature supplied] food from the earth to each [throughout both stem and boughs, their reasons are not only false, but they contradict each other. Space I have already proved to be infinite; and space being infinite, matter, as I have said, must also be infinite] lest after the winged fashion of flames' etc. **1106. omnis**: with the subj. of *abeat*. **1108. corp. solv.**: i.e., setting free the atoms by the breaking to pieces of everything. — **abeat**: Munro's emend. for *abeant*, which probably crept into the text from the adjacent plurals. With the thought cf. Shakespere, 'Tempest,' 4, 4: —

> "Melted into air, into thin air:
> And, like the baseless fabric of a vision,
> The cloud-capp'd towers, the gorgeous palaces,
> The solemn temples, the great globe itself,
> Yea, all which it inherit, shall dissolve;
> And, like this insubstantial pageant, faded,
> Leave not a rack behind."

1112. ianua leti: in this and the like expressions, Munro observes, the poets have idealized the solid stone doors of the tombs. **1113. foras**: as in 979, where see n.

If you shall know thoroughly these truths presented, fact will lead to fact, and ere long not one of nature's secrets shall be hid from you. 1114–1117.

1114. sei: archaic for *si*. After 1114 Munro supposes a vs. has been lost. He thus supplies its place, making both good sense and good constr. in a passage otherwise obscure and difficult: —

> Haec sei pernosces, parva perductus opella 1114
> cetera iam poteris per te tute ipse videre.



1115-7. Of these striking lines Prof. Sellar remarks that they "look rather like an unconscious prophecy of the future progress of science than an account of the process of inquiry exhibited in the book."
1118. **accen. lum.**: 'shall light the torch,' as in Enn. quoted by Cic., De Off. 1, 16, 51:—

> homo, qui erranti comiter monstrat viam,
> quasi lumen de suo lumine accendat facit.

BOOK III.

INTRODUCTORY, 1–93.

1. Praise of Epicurus. 1–30.

Thou art my guide, O glory of the Grecian folk, thou that with god-like reason hast revealed the true nature of things, hast shown the blessed abodes of the deities far away from all regard of men, and hast caused the realm of Acheron to vanish. 1–30.

3. **te**: Epicurus. The followers of Epicurus clung to his teachings with almost superstitious devotion. His immediate pupils were required to commit brief summaries of them to memory, and the practice appears to have been kept up as long as the school continued in existence. Such was the dogmatic impress which Epicurus stamped upon his doctrines that they never underwent expansion, never departed from his own utterances. In the servile dependence upon a founder, the Epicureans can be compared only with the Pythagoreans, who, it is said, had for all kinds of objections one and the same answer, αὐτὸς ἔφη, *ipse dixit.* The Epicureans usually spoke of their master with unmeasured laudation, and did not hesitate to call him divine. See n. to 1, 66. Cf. Cic. N. D. 1, 16, 43; Zeller, 'Stoics, Ep., and Scep.' ch. 16. 4. **ficta**: old participle of *figo*, = *fixa.* 5. **cupidus**: the adj. supplies the place of a causal clause, coördinate with *quod . . . aveo.* 8. **fortis**: 'spirited.' *fort. eq. vis* is found also 764, and was perhaps suggested by Ennius' line *sic ut fortis equs* etc., in Cic. Cat. Maior 5, 14 (Vahlens' Enn. Ann. 441). 9. **pater**: simply a term of respect, a common usage with the corresponding words in all languages. — **rerum inventor**: so Prof. Tyndall finds in Charles Darwin "the Abraham of scientific men." See Wainwright, 'Scientific Sophisms,' ch. 1, for other instances of like

adulation. — **patria**: see n. to 1, 94. **10. inclute**: see n. to 1, 40. — **chartis**: Epicurus was one of the most voluminous writers of antiquity. Diog. Laert (10, 26) says he left three hundred volumes, in which 'there was not a citation from other sources; but the books were entirely filled with Epicurus' own sentiments.' The style is said to have been exceedingly careless, bald, harsh, and full of repetitions. There are extant only four letters, the Maxims, and some fragments. **12. aurea dicta**: the Pythagoreans had golden verses (χρυσᾶ ἔπη) attributed to their founder; from them, perhaps, the expression here was borrowed. **14. vociferari**: see n. to 1, 732. **15. naturam rerum**: see n. to 1, 21 and 25. On the spirit of 14–17 cf. 2, 1–13 and n. to 1, 112 *ignoratur*. Democritus taught that the cause of fault is the ignorance of what is better (Frag. 116 ἁμαρτίης αἰτίη ἡ ἀμαθίη τοῦ κρέσσονος); Epicurus held, however, that happiness is not "directly promoted by knowledge, but only indirectly, in as far as knowledge ministers to practical needs, or clears away hindrances to their attainment." **16. moenia mundi**: see n. to 1, 73. **17. discedunt**: with *dis* emphatic, 'part asunder'; so 3, 436. — **inane**: see n. to 1, 330. On *geri res* see n. to 1, 328. **18. divum**: see n. to 1, 1. — **sedesq. quietae**: Epicurus pictured the gods as dwelling in the spaces of the universe between the worlds, ever blessed and unvexed by any pain or trouble, never interfering with the course of nature, and utterly regardless of mankind. Tennyson well brings out the spirit of this passage, 'Lucretius': —

> "The Gods, who haunt
> The lucid interspace of world and world,
> Where never creeps a cloud, or moves a wind,
> Nor ever falls the least white star of snow,
> Nor ever lowest roll of thunder moans,
> Nor sound of human sorrow mounts to mar
> Their sacred, everlasting calm!"

See also his 'Lotos-Eaters,' last stanza of the Choric Song. Cf. 2, 1090; 6, 58 *et seq.*; Diog. Laert. 10, 123 and 139; Cic. N. D. 1, 17, 44 *et seq.*; Cudworth, 'Intellectual System of the Universe,' i. ch. 2, § 2; Taylor Lewis, 'Plato against the Atheists,' Diss. 52; Zeller, 'Stoics, Ep., and Scep.' ch. 18; Id. 'Prae-Socratic Phil.', ii. 286–290; Ritter, 'Hist. of Ancient Phil.', iv. 85–7 and nn. **19–22.** These lines, edd. notice, are from Hom. Od. 6, 42–45: 'Olympus, where, as they say,

is the seat of the gods, that standeth fast forever. Not by winds is it shaken, nor ever wet with rain, nor doth the snow come nigh thereto, but most clear air is spread about it cloudless, and the white light shines over it.' Butcher and Lang's trans. **21. innubilus**: coined by Lucr. to express the Greek ἀνέφελος l. 45 of the passage rendered above. **22. rident**: Lachmann's reading for *ridet*; supply *dei* as subject. **23-4.** Cf. Cic. N. D. 1, 19, 50 *ea videlicet* (*vita deorum*), *qua nihil beatius, nihil omnibus bonis affluentius cogitari potest. nihil enim agit, nullis occupationibus est implicatus, nulla opera molitur, sua sapientia et virtute gaudet, habet exploratum fore se semper cum in maximis, tum in aeternis voluptatibus.* Cf. also Cudworth *ut sup.* i. ch. 2, 19. **25. contra**: see n. to 1, 66. — **nusquam ap.** etc.: the poet, forsooth, has searched the entire universe, and found no abodes of the dead. But it is difficult to prove a negative. — **Acher. tem.**: see n. to 1, 120. **26. dispiciantur**: i.e., by us, since reason can penetrate where the sight cannot. **27. quaec.**: see n. to 1, 1043. **29. adque**: = *atque*; *adq.* is sometimes found in both MSS. and inscriptions. See Neue, 'Formenlehre,' ii. 797-8. — **tua**: refers, of course, to Epicurus.

2. Subject and purpose of the book. 31-93.

I have explained the first-beginnings; now I must teach the nature of the soul, and drive forth that fear of death, which is the bane of life, even though men think they have cast it off. From this springs ruthless desire for wealth and power, which sate it not but lead to crimes; hence arise wars, betrayals of country and kin, nay even the seeking of death itself. This blighting dread true reason only can dispel. 31-93.

31. cunc. ex. rer.: see n. on 1, 55 *primordia.* **35. animi**: 'mind,' while *anima* is generally 'soul' in Lucr. **37** *et seq.* See n. to 1, 62. Only that soul could be tranquil that had banished all fears of religion and the hereafter. To surmount these was the only aim of philosophy. "If it were not for the thought of God and the fear of death there would be no need of studying nature." See Benn 'The Greek Philosophers,' ii. ch. 2, § 4; Zeller, 'Stoics, Ep. and Scep.' ch. 17, A (2), and ref. to authorities there. In accordance with the spirit of this passage Verg. says (Georg. 2, 490-2): —

> **Felix, qui potuit rerum cognoscere causas,**
> **atque metus omnes et inexorabile fatum**
> **subiecit pedibus strepitumque Acherontis avari!**

41. **quod**: 'as to the fact that.' 43. **nat. animi sang.**: said to have been the view of Critias, the pupil of Socrates; and Empedocles taught that the blood, as in it the primal elements are most completely blended, is the principal seat of thought and consciousness; αἷμα γὰρ ἀνθρώποις περικάρδιόν ἐστι νόημα is the language of one of the fragments of Emped. Cf. Cic. Tusc. Disp. 1, 9, 19 *Empedocles animum esse censet cordi suffusum sanguinem*. 44. **venti**: i.e., *aëris*, the doctrine of Anaximines and Diogenes of Apollonia; see Zeller, 'Prae-Soc. Phil.' vol. i. Cf. Cic. T. D. 1, 9, 19 *animum autem alii animam* (=*aërem*, as Lucr. 1, 715), *ut fere nostri, declarant nomen; nam et agere animam et efflare dicimus, et animosos, et bene animatos, et ex animi sententia; ipse autem animus ab anima dictus est*. 45 *et seq*. Even philosophers, who have taught the physical nature of the soul, and its dissolution after death, have sought not so much truth as fame; and, when met by life's reverses, their false doctrines have failed them, and they have returned to the most debased rites of superstition. The implication is, that the poet's philosophy is the only one that can really assure peace of mind under all circumstances. 46. **adv. an.**: = *animadvertas*; cf. below 54. 52. **nigras pec.**: only black victims were sacrificed to the gods of the Lower World. See Ramsay, 'Man. of Rom. Antiq.' p. 342.— **manibu'**: see n. on 1, 159 *omnibu'*. 54. **ad**: not necessary, as the acc. might, and in such phrases generally does, depend on the prep. in the verb. 55-8. It was a maxim of Francis, Duc de Rochefoucauld, that 'Philosophy triumphs easily over past and over future evils, but present evils triumph over philosophy." With similar underlying thought, Seneca says (De Prov. 3, 3, taken from Demetrius) *nihil mihi videtur infelicius eo, cui nihil umquam evenit adversi*. 59. **denique**: see n. to 1, 199. — **avarities**: found only here and Claud. De iii. Hon. Cons.; for *avaritia*. — **honorum**: to the Roman this word suggested the public offices (*honores*) the struggle for which so disturbed and disgraced the decline of the Republic. 61. **soc. sc. atq. min.**: *coniunctio*; see n. to 1, 146. 62. **noctes . . . opes**: repeated from 2, 12-13. 63. **vulnera**: in apposition with *avarities* and *cupido*. Men strive to get wealth and power in order to

deaden or put away the dread of death. Epicurus taught that the needs of nature are easily satisfied, and hence moderate means and simplicity of life are desirable. See 2, 14 *et seq.* **65. contemptus**: in a passive sense, a 'being slighted'; 'scorn.' **66. videntur**: passive. **67. cunctarier**: see n. to 1, 207. — **ante**: with *portas*. **68. unde**: = *a quibus*. See n. to 1, 56. **69.** For the chiasmus see n. to 1, 22–3. **70. rem**: for *rem familiarem*, as often in both prose and verse; trans. 'property.' **71.** For the alliteration see n. to 1, 14. **73. consang.**: see n. to 1, 1 *divom*. Among the later Romans poisoning was a favorite way of getting rid of obnoxious persons. **78. partim**: takes the place of a subject; trans. as if *pars* or *alii*. — **ergo**: prep. **79–81.** Quoted and illustrated by Burton, 'Anat. of Melancholy,' 1, 4, 1. **80. humanos**: for *homines*. "Their soul abhorreth all manner of meat; and they draw near unto the gates of death." Ps. 107, 18. **81.** The Stoics approved of suicide as an escape from circumstances which seemed unendurable; but Epicurus accepted it as advisable only in extreme cases. For the whole subject of suicide, ancient and modern, see Lecky, 'Hist. of European Morals'; consult index, vol. ii. **82. timorem**: i.e., *mortis*. **83. hunc**: supply *timorem*. — **vinc. am.**: notwithstanding the fact that the Epicureans based friendship on utility they gave it a very important place in practical life. Hence the mention of it in this connection. **84. suadet**: difficult to construe with the present reading; suppose a semicolon before *et*, and supply *hic* referring to *timorem*. Munro thinks that after 83 there is a hiatus, which he thus supplies, *qui miseros cogens scelus omne patrare*, — making *hunc . . . hunc* refer to men, 'this one,' 'another.' For *suadet* Lambinus reads *fundo*, Lachmann *fraude*. **86. prodiderunt**: see n. to 1, 406. — **Ach. tem.**: see n. to 1, 120. **87–93.** = 2, 55–61; 6, 35–41. For 91–3 cf. 1, 146–8 and nn. Of 87–8 Seneca says, Ep. 110, 6–7, *Quid ergo? non omni puero stultiores sumus, qui in luce timemus? sed falsum est, Lucreti, non timemus in luce: omnia nobis fecimus tenebras. nihil videmus, nec quid noceat nec quid expediat. tota vita incursitamus, nec ob hoc resistimus aut circumspectius pedem ponimus.*

i. THE NATURE OF THE MIND AND SOUL.

1. The mind and soul are an essential part of man. 94-135.

The mind is as much a part of man as hand or foot, and is not a mere harmony of the body; for often it has a feeling of pleasure when the body is ill, and is wretched when the body is well; it keeps active, too, when the body is relaxed in sleep. **94-116.**

94. Primum: refers to 117 *nunc.* — **animum . . . mentem**: 'mind' . . . 'intellect,' or 'understanding,' used by Lucr. as synonymous terms, as he here indicates; thus, too, in 139 *consilium* 'directing principle' is taken. This group of terms for the mind should be carefully distinguished from *anima* 'the soul,' i.e., 'life-principle'; the latter is considered common to men with brutes; while the former, in which lies the power of reason, is of course confined to men. Cf. Juv. Sat. 15, 147-9:—

> Mundi
> Principio indulsit communis conditor illis (i.e. bestiis)
> Tantum animas, nobis animum quoque.

and Mayor's n.; see also n. to 136. — **quam**: see A. 195, *d;* G. 202, Rem. 5; H. 445, 4. **95. consilium vit. reg.**: 'directing and governing principle of life.' **96. nilo**: see n. to 1, 155. **97. oculei**: old form of pl.; see n. to 1, 230. — **extant**: for *sunt.* **98.** Before this verse one or more vss. have dropped out; edd. adopt a makeshift verse *quamvis multa quidem sapientum turba putarunt* (or in early edit. for *put. putaret*), which gives a good constr. to the following infin. **99. verum**: here adversative. **100. harmoniam**: the doctrine of the soul, as a harmony of the body, is brought out by Simmias in Plat. Phaed. p. 85 *et seq.;* it is there repeated by Socrates, and is combated by Aristotle De An. 1, 4. It was more fully developed by Aristoxenus, a pupil of Aristotle, of whom Cicero says, Tusc. Disp. 1, 10, 19-20: *Aristoxenus, musicus idemque philosophus, ipsius corporis intentionem quandam, velut in cantu et fidibus quae harmonia dicitur; sic ex corporis totius natura et figura varios motus cieri tamquam in cantu sonos.* This harmony was something entirely different from that spoken of in connection with the soul by the Pythago-



reans, who believed in metempsychosis. Spencer, in explaining the law of association, has hit upon a doctrine suggestive of this view of Aristoxenus; see Bowne, 'Philosophy of Herbert Spencer,' p. 179. — **quod**: conj. 101. **siet**: archaic for *sit*, found in the old writers, especially Plautus, and in inscriptions. Cf. Gk. εἴη, Sanskrit syāt. 102. **valetudo**: see n. to 1, 178 *tempestates*. 103. **et tamen**: see n. to 1, 1050. — **haec** etc.: 'it is not any (definite) part of the man in good health.' 105. **mi**: see n. to 1, 924. 106. 'Oftentimes the body which is visible to sight, is sick.' 113. **honustum**: a less common, but well-attested spelling for *onustum*. See Munro's n. 115. **multimodis**: see n. to 1, 895. 116. **inanis**: for spelling see n. to 1, 7 *suavis*.

The soul is likewise no mere harmony; for it lingers when much of the body has been taken away; but when a few particles of heat have left the form at once it goes; thus all bodies are not equally important to maintain life. Then give back this word harmony to the musicians. 117–135.

118. **corpus**: acc. to *solere*, while *harmonia* is abl. 119–20. For illustrations of the truth of this statement, see Carpenter, 'Principles of Comparative Physiology,' § 650; Herbert Spencer, 'Prin. of Psychology,' i., § 177. 124. **aequas partis**: 'functions of like importance,' i.e., in maintaining life. 125. **corpora**: i.e., *corpora prima*; see n. to 1, 55. 126. **venti**: see n. to 232 *aura*. — **vaporis**: see n. to 1, 491. 128. **vitalis**: with *color* as well as *ventus*. 132. **ad** etc.: supply *sive*; for the whole constr. cf. Hor. Od. 1, 32, 6 *Qui ferox bello tamen* (*sive*) *inter arma, Sive iactatam religaret udo Litore navim*. The thought here is, whether the term harmony was brought down to musicians from the Muses' home, or whether they themselves borrowed it and applied it to that in music, which previously was without a distinctive name. — **organicos**: Aristoxenus was more famous as a musician than as a philosopher; and of his numerous writings on many subjects, important fragments of his treatises on music only remain. 133. **illam**: instead of *rem* here *res* is inserted in the relative clause, — a common constr. Exactly what we are to understand by harmony in ancient music is an open question. 134. **transtulerunt**: see n. to 1, 406. 135. **habeant**: = *habeant sibi*, as Munro remarks, with the contempt usually implied in the expression. — **tu**: **Memmius**; see nn. to 1, 26, and 102.

2. The mind and soul are inseparably united. 136–160.

The mind and soul are united, making one nature; but the mind is the directing part and is situated in the mid-region of the breast, while the soul is diffused throughout the body. Sometimes the mind feels when the soul remains unmoved; but when the mind is deeply stirred, the soul too is affected, and with it the whole body. 136–160.

136. **animam**: All through here by *anima* 'soul' the poet means the life-principle, through which the body feels, and through which the mind sends its directing impulse to the limbs. See n. to 94. In *animus* and *anima* is the distinction, maintained also by the Stoics, between the rational and the irrational soul, the reason and the vital principle. For the view of Aristotle see Ritter, 'Hist. of Anc. Phil.' iii. ch. 4; Grote, 'Aristotle,' ch. 12; for that of the Stoics, Zeller, 'Stoics, Ep., and Scep.', ch. 9; for that of Epicurus, Id. ch. 17, C (2). 139. See n. to 94. 140. That sensation and intellectual activity have their centre in and about the heart was the doctrine alike of Peripatetics, Stoics, and Epicureans. The brain was reckoned of only secondary importance. Democritus taught that anger alone arises in the heart, while thought has its origin in the brain, and desire in the liver. With 140 cf. Epicurus' statement in Diog. Laert. 10, 66 *καὶ τὸ μέντοι αὐτῆς* (i.e., *τῆς ψυχῆς*) *ἄλογον εἶναι, ὃ τῷ λοιπῷ παρεσπάρη σώματι· τὸ δὲ λογικόν, ὃ ἐν τῷ θώρακι, ὡς δῆλον ἔκ τε τῶν φόβων καὶ τῆς χαρᾶς*; also Cic. Tusc. Disp. 1, 9, 19 *aliis pars quaedam cerebri visa est animi principatum tenere; aliis nec cor ipsum placet nec cerebri quandam partem esse animum; sed alii in corde, alii in cerebro dixerunt animi esse sedem et locum.* 141. **pavor ac metus**: *pavor* is the quaking fear of that which is present or near, *metus* the anxious dread of that which is in the future. 142. **laetitiae**: the pl. of this word is very rare. — **ergo** etc.: a striking instance of insufficient induction. 143. **cet. pars**: part of the soul is in and of the mind; the rest is diffused through the body. 144. **numen**: 'beck.' — **movetur**: see n. to 1, 421. 145 **idque**: same as *idque* of 140, referring to *consilium* of 139. 146. **res**: i.e., through the senses. — **una**: adv. 151. **artus**: 'frame.' 152. **vementi**: *vehemens* is pronounced as two syllables in verse, whether written in full or

contracted form; for according to the general law *h* between the two vowels was disregarded, and the vowels being alike coalesced. **153. consentire**: 'sympathize,' 'become sympathetic.' **156. sonere**: old form of *sonare*. *sonit* and *sonunt* and like forms of compounds are found in the fragments of Ennius and Attius. See Neue, 'Formenlehre' ii. 420–1. **160 exim**: a labialized form of *exin*, for *exinde*.

3. The mind and soul are material in nature, and composed of the finest atoms. 161–230.

That the mind and soul are of material nature is evident because they move and control the body, a thing they could not do without touch, which is a property only of body; and the mind suffers along with the body, sympathizing with it. 161–176.

161. nat. an. corp.: cf. Epicurus in Diog. Laert. 10, 63 'the soul is a bodily substance, composed of small particles, diffused throughout the body' etc. This was, of course, the doctrine of the Atomists. See Zeller, 'Prae-Soc. Phil.' ii. 256 *et seq.*; Ueberweg, 'Hist. of Phil.' i. 70. Consult also Zeller, 'Stoics, Ep., and Scep.', ch. 17 c, (2) and Ritter, 'Hist. of Anc. Phil.' iii. Pt. 4, ch. 2 for full discussion of the Epicurean view. The position of modern Materialism in general is, that while the real nature of mind is beyond our ken, its phenomena may be coördinated with physical phenomena, and it will probably at last be shown to be merely a manifestation of matter. Huxley believes that "we shall arrive at a mechanical equivalent of consciousness, just as we have arrived at a mechanical equivalent of heat"; quoted by Wainwright, 'Scientific Sophisms' ch. 8. See n. to 1, 443. But cf. Tyndall, 'Frag. of Science,' edit. 5, p. 561: "While accepting fearlessly the facts of Materialism dwelt upon in these pages, I bow my head in the dust before that mystery of mind, which has hitherto defied its own penetrative power, and which may ultimately resolve itself into a demonstrable impossibility of self-penetration." For Spencer's position see also Bowne, 'Review of Herbert Spencer, p. 17 *et seq.* **164. videtur**: for subject refer back to *naturam*. **165–6.** A position obviously unsound, not merely because negative propositions of this sort cannot be proved without an infinite intelligence, but also because force and its mode

of operation are ignored. The inadequate treatment of force and motion is one of the weakest points of Lucretius' as of all other ancient systems of physics. Cf. Hamilton, 'Metaphysics,' p. 212. **168. fungi**: see n. to 1, 441. **173. segnis**: Munro's emend. for *suavis* of MSS., which is meaningless in this connection. Lachmann reads *suppus*. — **et** etc.: 'and on the ground the tumult of mind which arises.' **175-6.** The first statement by no means follows from the second; because whatever the nature of the mind, so long as it remains in connection with the body at all, and the body is the means through which it manifests itself, anything that affects the body must affect the manifestation of it, whether in its nature it be affected or not. **176. quoniam**: see n. to 1, 339.

The mind and soul are made up of the finest round atoms. This is shown by the rapidity of the mind's action, and by the fact that after death no perceptible loss of weight can be observed in the body. 177-230.

177. tibi: see n. to 1, 673. — **animus**: under this term, Munro remarks, the poet here includes *anima* as well, as is clear from 212 below and the rest of the paragraph. It is the general practice of Lucr. to keep distinct similar words when the argument requires it, but to use them indifferently when precision is not called for. **178. constiterit**: perf. for pres. subj., — a usage by no means rare. **179. persuptilem**: see n. to 1, 79 *opteritur*. Cf. the teaching of Epicurus in Diog. Laert. 10, 66, that the soul is composed of the smoothest and roundest atoms etc.; for full discussion see ref. to 140, 161. **181. hinc**: refers to what follows; *hinc* is more commonly used of what precedes. **182. videtur**: passive. **183.** This line certainly implies the mind's self-activity, — a doctrine employed by Plato, and after him by Cicero, to prove the immortality of the soul. See Plat. Phaedrus 245 C; Cic. De Sen. 21, 78. **184.** *ergo animus se perciet ocius quam ulla res* (*illorum*, i.e., *illarum rerum*), *quorum* etc. — **se perciet**: a kind of middle voice = passive, 'is stirred'; see n. to 1, 678. **185. ante oculos**: see n. to 1, 63. **186. rutundis**: for *rotundis*, by assimilation. Two vowels separated by a single consonant tend to become the same; thus *bene* for *bone*, *soboles* for *suboles*. See Peile, 'Introd. to Gk. and Lat. Etymol.' edit. 3, p. 308; Vaniček, 'Etym. Wörterb.' p. 50. **187. debet**: see n. to 1, 290. **189. flutat**: contracted for *fluitat*; so 4, 77 *flutant* for *fluitant*. **190. figu-**



ris: see n. to 1, 685; *fig.* is here used for the atoms themselves. **191. natura**: see n. to 1, 21. **192. actus**: 'movement.' **196. papaveris**: 'poppy-seed'; gen. after *acervus*. — **suspensa**: 'gentle.' The little round seeds of the poppy the slightest breeze will scatter; but the stones, large and rough, the east wind itself cannot move. That which is small and round is most easily moved; since the movement of the mind is so swift, the atoms of which it consists must be the smallest and roundest. **198. ipse euru' mov.**: Munro's emend. for *spicarumque*; Bernays reads *Cauru' movere*, Lachmann *spiritus acer*. In Southern Italy the south-east wind was often rapid and violent. **199. noenu** = *noenum*, old form of *non*, from *ne-oenum*, i.e., *ne-unum*. Cf. 4, 712. *noenum* is not uncommon in the old writers. — **proquam**: conjunctive adv. introducing a clause of comparison; 'in proportion as.' **200. fruuntur**: 'have,' 'are possessed of.' **201. cum**: see n. to 1, 347. **204. egregie**: see n. to 1, 735. **205. levibus**: notice *lēvibus*, not *lĕvibus*.

206–7. Cf. 1, 331. **206. bone**: refers, of course, to Memmius. The voc. of *bonus*, both sing. and pl., is used either with courtesy, as here, or with irony, as Hor. Sat. 2, 3, 31 *O bone, ne te Frustrere: insanis et tu, stultique prope omnes.* **207. cluebit**: for *erit*; see n. to 1, 119. **208. haec**: here used of that which follows; 'the following.' — **eius**: i.e., *animi*. For the proleptic use of *naturam* cf. 1, 950 and n. **213. cernas**: for the mood see Madvig, 'Gr.' 370 and Obs. 1; A. 266, *a*; G. 256, 2; H. 484, iv. n. 2. This use of the indefinite second pers. of the subj. does not influence at all the mood of an accompanying clause, even when dependent, as here. **214. ad**: 'as regards,' 'with reference to.' Roby, 'Gr.' 1827, gives numerous examples of this use of *ad*. **218. quatenus**: 'since.' **220. nec . . . hilum**: for *nihil*, *nihilum* (*ne-hilum*). *hilum* is used here as adv. acc. As to its derivation there is disagreement; Vaniček (Etym. Wörterb. p. 256) following Varro connects it with *hillae*. Cf. 3, 514; 3, 783; 3, 830 etc.; n. to 1, 155. **221. quod genus**: acc. of description, 'as for instance,' 'just as'; common in Lucr., and found four times in Cornificius. See Roby, 1104 and n. 2. — **Bacchi flos**: the *flos vini* was a peculiar light scum (ἄνθος οἴνου) that often after a time appeared on the surface of wine; to the color and consistency of this great significance was attached as determining the quality of the liquor. See Smith, 'Dic. of Antiq.' p. 1202. But Munro, quoting Plaut. Curcul. 96 *flos veteris vini naribus meis obiectust*, under-



stands by *Bac. flos* here the flavor or bouquet of the wine, doubtless the correct interpretation, to judge from the context and 2, 848 *nardi florem.* **227. rerum**: i.e., the wine, the perfume, and the body from which moisture has escaped. **229. scire licet**: see n. to 1, 860. **230. seminibus**: see n. to 1, 55 *primordia.*

4. **The mind and soul are complex; and by the different proportion and mixture of the four parts different characters are produced.** 231–322.

The mind is composed of wind, heat, air, and a subtle nameless fourth element, in which arise the beginnings of sensation, and of which the least hurt will cause death. 231–257.

231. Cf. the doctrine of Epicurus in Plut., De Plac. Phil. 4, 3 that the soul is *κρᾶμα ἐκ τεσσάρων, ἐκ ποιοῦ πυρώδους, ἐκ ποιοῦ ἀερώδους, ἐκ ποιοῦ πνευματικοῦ· ἐκ τετάρτου τινὸς ἀκατονομάστου, ὃ ἦν αὐτῷ αἰσθητικόν*; also Diog. Laert. 10, 63. Consult ref. to 140; but in the Eng. trans. of Zeller the three elements are wrongly given as "fire, air, vapour" ('Stoics, Ep., and Scep.' new edit. p. 454). **232. tenvis**: see n. to 1, 875. — **aura**: elsewhere spoken of as *ventus*, as 247, 269. It corresponds to the *ἐκ ποιοῦ πνευματικοῦ* in the passage quoted above, to *πνεῦμα* in Epicurus' own words as given by Diog. Laert. Wind (*ventus* or *aura*) seems to have been looked upon as the element of coolness, the origin of fear, as opposed to heat (*vapor* or *calor*, see n. to 1, 491), the source of passion, while air (*aër*) is the element of equanimity, of calm poise; see below 288 *et seq.* It must be borne in mind that each one of these elements is regarded as a combination of atoms, so that the soul itself is a combination of combinations of atoms. **234. quisquam**: see n. to 1, 1077. — **cui**: the use of the dat. with *misceri* and *se miscere* is poetic. See Kühner, 'Ausführ. Gram.' ii. p. 234. **236. inter**: 'inside of.' **238. haec**: i.e., wind, heat, air. **239. res**: Bernays and Munro for *mens;* in 240 Munro writes *et homo quae* for the obviously corrupt *quaedam que.* Lachmann with constr. not at all clear reads the two lines *Nil horum quoniam recipit quem posse creare, Sensiferos motus quaedam vis menti' volutat.* For *res* I incline to the MSS. *mens.* Trans. *nil res recepit* 'the fact of the case does not admit that any.' — **recepit**: for *recipit;* Munro, with the two best MSS.: "Vergil's and other MSS.

retain many traces of this *e*, intermediate between the *a* of the simple verb and the later *i*." **240 sensiferos**: found only in Lucr. Cf. n. to I, 275. **241** etc. It would be hard to find an instance of more utterly groundless speculation than here presented. "The difficulty of fixing the exact seat of sensation is in the most important point completely evaded by the Epicurean system; and in spite of the immense progress of physiology, the Materialism of the last century found itself at precisely the same point. The individual atoms do not feel, or their feelings could not be fused together, since void space, which has no substratum, cannot conduct sensation, and still less partake of it. We must, therefore, constantly fall back on the solution, — the motion of the atoms is sensation. Epicurus, and with him Lucretius, in vain seeks to veil this point by saying that, besides the subtle atoms 'that make up the three other parts of the soul,' there is still a fourth constituent associated with them, wholly without name, and of the utmost fineness and mobility, which forms the soul of the soul. But with regard to these subtlest soul-atoms the difficulty still remains the same as it also does for the vibrating brain-filaments of De la Mettrie." Lange, 'Hist. of Materialism,' i. 146–7. To explain the origin of sense or feeling, and the source of the impulse of voluntary movement, is a hard nut for materialists to crack. Epicurus and Lucr. are not the only ones that have taken refuge in something unknown and unknowable. **242. east**: see n. to I, 10. It has been suggested that perhaps Epicurus derived his idea of this fourth essence from the quintessence of Aristotle. **246. figuris**: see n. to 190. First the fourth element or essence is stirred; this transfers motion and feeling to the heat-element, this in turn to the wind, the wind to the air-element; hence blood, vitals, finally bone and marrow, receive the impulse. "Epicurus appears to have supposed, in sharp contrast with our theory of the conservation of force, that a subtle body may pass on its own movement to a heavier, independently of the bulk, and this in turn to a still heavier; so that the sum of mechanical work done, instead of remaining stationary, goes on multiplying from step to step." Lange, ut supra. **247. motus**: acc. **252. huc**: i.e., to the seat of this fourth subtle element of the soul. **256.** 'But generally a stop is put to (these hurtful) motions on the surface, as it were, of the body.'

These four elements are inseparably united, forming a single whole, just as different substances go to make up one body. The subtle, nameless essence holds the innermost place. is, as it were, the soul of the soul. While the other three parts exist only in union, one becomes more prominent than the others, and thus differences of character are produced; these, however, a wise man by reason may so far overcome as to pass a life worthy of the gods. 258–322.

259. **compta**: see n. to 1, 950. **260. invitum**: 'against my will.' Supply *me* as obj. of *abstrahit.* — **pat. ser. egestas**: see n. to 1, 137–9. **262. inter en. cur.**: tmesis. — **principiorum**: for *primordiorum*; see n. to 1, 55; hence, as Munro remarks, *princ. mot.* = *suis motibus.* **264. nec** etc.: 'nor can the function (of any) go on divided (from the rest) by any interval.' **265. vis**: nom. pl. = *vires*; *vis* acc. pl. is found 2, 586. For other instances of the use of the contr. form see Neue, 'Formenlehre,' i. 497. **266. animantum**: see n. to 1, 4. — **viscere**: see n. to 1, 837. **268. augmen**: 'bulk.' **269. venti**: see n. to 232. **271. initum**: see n. to 1, 383. — **ab se** etc.: it originates motion, which it imparts from itself to the other three soul elements, as shown 245 *et seq.* — **ollis**: see n. to 1, 672. **272. unde**: see n. to 1, 56; refers to *ollis.* **274. infra**: adv. = (as Munro suggests) 4, 112 *infra nostros sensus;* this last is the only passage in Lucr. where *infra* is a prep.; see Holtze, 'Syntaxis Lucret. Lineamenta,' p. 74. **276–81.** Just as the mind and soul are diffused, invisible, through the body, so this fourth most subtle essence is diffused through the soul, as the soul of the soul. **281. proporro**: a Lucretian word; 'furthermore,' 'more than this.' **282. necessest**: see n. to 1, 270. **283. artus**: 'frame.' **284. adque**: see n. to 29. **286. seorsum**: usually a dissyllable in Lucr. as here: but also a trisyllable, as 3, 551 *naresve seorsum.* **287 interemant**: for spelling see n. to 1, 216. **288.** Consult n. to 232. **293. fit qui**: more euphonious than the natural order *qui fit.* **297–8.** The breast is unable to contain the boiling billows of rage, and is ready to break, Munro observes, after Heyne to Aen. 12, 526 *nunc, nunc Fluctuat ira intus; rumpuntur nescia vinci Pectora;* Heyne says "that the image there is taken from water boiling up, which strives to burst the vessel in which it is confined." **301. faciunt**: *facere*, 'to cause,' is usually followed by the subj. **302 aëre**:

vivere is sometimes construed like *vesci* with an abl. of means. **303. percit**: Lucr. has also *perciet*, 4, 563. **305. torpet**: for subject refer back to 302. **306. inter utr. sitast**: an old reading adopted by Munro for *inter utrasque sitas*. Lachmann has *interutraque secus*. 307 *et seq.* For a discussion of this passage see Ritter, 'Hist. of Anc. Phil.' iv. 94–5. 308 etc. Philosophy cannot obliterate distinctions of character, cannot efface individuality. **315. sequacis**: i.e., the trend or bent of characters being determined by the different natures underlying them. **318. variantia**: see n. to 1, 653 **319 illud etc.**: see n. to 1, 80. — **firmare**: = *affirmare.* — **potesse**: see n. to 1, 665. **322** Cf. Epic. in Diog. Laert. 10, 27, 135 . . . 'You will live as a god among men; for in no respect like a mortal being is a man that lives among imperishable blessings.' See, also, Zeller, 'Stoics, Ep. and Scep.' ch. 19, C. In vss. 307–22 Munro thinks that "there is pointed reference to the perfect apathy of the wise or good man." Lucr. admits that a man may become so far independent of his surroundings as to live like a god; but not that he can be entirely uninfluenced by them, and in every respect maintain an iron curbing of his own nature.

ii. The Relation of the Mind and Soul to the Body.

1. The mind and soul exist in vital connection with the body. 323–369.

The soul and body are so connected that neither can be taken away without the destruction of both. By their common motions sense is produced; and without soul no body is born or grows or can exist. 323–349.

323. haec natura: i.e., *animi*, = *animi et animae*; cf. 231 and see n. to 177. — **ab**: this use of *ab* with abl. instead of the simple abl. is chiefly confined to poetry, and is most frequently met with in Ovid. **325 haerent**: i.e., *natura animi et corpus.* **327. glaebis**: 'pieces,' 'masses'; Lucr. elsewhere uses this word only in its common meaning, 'clods of earth.' **333. posse**: see n. to 1, 586. **335–6.** Cf. Epicurus in Diog. Laert. 10, 24, 63–64 'we must admit that the soul contains the chief cause of sensation. It would not, indeed, possess this, if it were not enveloped by the rest of the body. The rest of

the body, imparting to it this power, receives the same (**μετείληφε τοιούτου συμπτώματος**) from it: but the body does not have all the states which the soul has' 337-8 De la Mettrie in his 'Histoire naturelle de l'âme' maintains exactly this view, that body and soul are formed together and together perish; so all thorough-going materialists, who are consistent, must believe. 339. **vaporem**: not 'vapour'; see n. to 1, 491. 343. **conque putr.**: tmesis. 344 *et seq.* Cf. 558-579 and nn. 348. **quoniam** etc.: 'since the cause of existence lies in their joint action,' as Munro puts it.

It is an error to suppose that sensation is due entirely to the soul. Yet without soul the body has no sensation; because sensation is only an accident, not an essential property. 350-8.

350. **quod sup.**: see n. to 1, 50. 352. **sensum**: 'sensation' does not express the full meaning of the word; it signifies rather 'capacity of feeling'; 'sense' is ambiguous. 353. **manifestas**: see n. to 1, 855. 354. **sit**: the subject is *corpus sentire*; the *quid*-clause stands as obj. to *adferet*. 355. **si . . . res**: 'except that which the plain fact of the case.' 356-7. Cf. Epicurus in Diog. Laert. 10, 24, 64-65, where this doctrine is more fully set forth. 357. **proprium**: i.e., *coniunctum* 'essential property'; see n. to 1, 451. — **aevo**: = *vita*; cf. n. to 1, 549. 358. **perd. qu. exp. a.**: Munro's reading for *perditum expellitur aevo quam*, which is manifestly wrong. Bernays rejects the verse, Creech condemns it, and Lachmann, with harsh constr., reads *nullaque praeterea perdit, quom expellitur aevo.* — **expellitur**: for subject refer back to *animā* in 356; *multa* stands as obj. to *perdit; quam . . . ante* of course for *antequam*.

Again, it is wrong to say that the eyes themselves do not see, but that the mind looks through them as through open doors. For if this were true, the eyes would not be dazzled and hindered from seeing by bright lights; and, moreover, the mind ought to be able to see better with the eyes entirely taken away. 359-369.

359. **Dicere . . . diffic.**: strictly speaking, an inaccuracy, though a common one; the thing is not hard to say, but hard to believe or prove. For the doctrine cf. Cic. Tusc. Disp. 1, 20, 46 *Nos enim ne nunc quidem oculis cernimus ea, quae videmus; neque est enim ullus sensus in corpore, sed ut non physici solum docent verum etiam medici qui ista*

aperta et patefacta viderunt, viae quasi quaedam sunt ad oculos, ad auris, ad naris a sede animi perforatae. itaque saepe aut cogitatione aut aliqua vi morbi inpediti apertis atque integris et oculis et auribus nec videmus nec audimus, ut facile intellegi possit animum et videre et audire, non eas partis, quae quasi fenestrae sint animi, quibus tamen sentire nihil queat mens, nisi id agat et adsit; also Id. N. D. 3, 4, 9; frag. of Epicharmus νόος ὁρῇ καὶ νόος ἀκούει, τἆλλα κωφὰ καὶ τυφλά. From a passage in Sex. Empir. Lassalle, followed by Munro, thinks it probable that this illustration of the doors of the mind came from Heraclitus. Lactantius (De Opific. Dei 7 and 9) attacks the doctrine in 359 *et seq.*; for the Stoic view see Plut. De Plac. Phil. 4, 21; Plin. N. H. 11, 54. With all the accuracy and minuteness of modern physiological and psychological analysis the exact relation of the visual image to the brain and thought remains a mystery. **362. sensus**: i.e., *oculorum;* supply *animum* as obj. to *trahit* and *detrudit*. — **acies**: for *oculos;* so 4, 248. **364. lum. luminibus**: a play upon words; 'eyes,' 'by lights.' 366. **ostia**: used literally; the open doors of the house are not hurt by our looking through them. **369. postibus**: keeps up the illustration; if the mind looks through the eyes, as through doors, of course the larger the aperture the better they would be able to see; hence vision would be improved by taking away not merely the doors, but the door-posts also, — the eyes and whatever encloses them. See n. to 1, 919.

2. The atoms of soul are much finer and fewer than those of the body. 370–395.

Believe not the teaching of Democritus, that there are atoms of soul as many as of body; on the contrary, they are much smaller and rarer. For often fine particles, as of dust or light things, like the spider's web, touch the body unfelt; but if atoms of soul lay alternate with those of body all such could not fail to excite sensation. 370–395.

371. Democriti: with Leucippus, the founder of the atomic theory; hence spoken of with reverence by our poet. For his life and doctrines, see Zeller, 'Prae-Soc. Phil. vol. ii.; Ritter, 'Hist. of Anc. Phil.' vol. i.; also p. xix. **372–3. sing. . . . var.**: 'placed together in successive layers come in alternate order.' For *privis* see n. to 723; for *alternis* n. to 1, 524. Democritus taught that between every pair of atoms of body there is a soul-atom; thus there is an

is rare except in post-Ciceronian writers. Cf. 3, 705-6. In all such constr. the indic. is more vivid than the subj. **404. circum**: adv. with *adempta*. Since the soul is distributed throughout the body (143), as parts of the body are cut off, portions of the soul also are lost. **406. at**: mildly adversative; 'yet,' 'at least.' **407. cunc. et haeret**: i.e., *truncus*. **409. cernundi**: see n. to 1, 59. **410. luminis orbem**: 'the eye-ball.' **411. aciem**: here 'the pupil'; cf. n. to 362. **412. et orbei**: Munro's reading for the awkward *eorum*; he thus explains the line as emended: '*that* too, the cutting it entirely away round the pupil, cannot be done to the *ball* even, without total ruin, i.e., of the whole seeing power.' This appears forced; but no better suggestion is at hand. **415. aliquoi sit**: Munro's emend. for *alioqui* of the MSS.; *aliquoi* is a dat. of possession; archaic for *alicui*, perhaps not elsewhere found, though *aliquoius* for *alicuius* occurs.

iii. The Mortality of the Soul.

1. Arguments against the soul's immortality. 417-829.

Heed now, and I shall show that the soul is mortal. 417-424.

417. Nunc age: see n. to 1, 265. — **nativ. et mor.**: see n. to 1, 754. **419-420.** Cf. 1, 412-7 and n. **421. uno subiun. nom.**: Munro, for *subiungas nome*; Lachmann reads *uni subiungas nomen*. — **iungas**: *ut* is often omitted after *facere*. — **eorum**: i.e., *animi et animae*; dep. on *utrumque*. In the following discussion mind and soul are to be considered together as one thing under one term. **422. verbi causa**: = *verbi gratia*, 'for example.' **423. dicere**: supply *me*. **424. quatenus**: see n. to 218; 'inasmuch as both make up one thing and are one united substance.' After these introductory lines follow twenty-seven arguments for the mortality of the soul.

(1) *The subtle texture of the soul lays it open to quick and inevitable dissolution.* 425-444.

425. constare: construed with either simple abl. or abl. with *ex.*; supply *animam*. **426. docui**: 177-230 above. **427. principiis**: see n. to 1, 55. — **liquidus umor**: found also 1, 349. **429. magis**:

with *tenui*; i.e., *quam umor aquai, nebula, fumus*. **430. imaginibus**: an allusion to the Epicurean doctrine of sense-perception, explained at length in Book 4: see Introd. **431. quod genus**: see n. to 221. — **in somnis**: the idols, or thin images, thrown off from the surface of things were supposed to affect the mind in sleep and to cause dreams. See 4, 788 *et seq.* **433. proc. dub.**: see n. to 1, 812. — **hinc**: see n. to 181. **434. nunc ig. quon.**: resumes the argument interrupted by the parenthesis. 435. Notice the chiasmus; cf. 437–8 and see n. to 1, 22–3. **438. ocius et citius**: i.e., *quam umor, nebula, fumus*. **440. quippe etenim**: 'For, inasmuch as'; cf. 6, 617 *quippe enim*. — **vas**: so the later Greeks, particularly the ecclesiastical writers, use **ἀγγεῖον** and **σκεῦος** of the body; cf. Philo 1, 223 **τὸ τῆς ψυχῆς ἀγγεῖον, τὸ σῶμα**; 1 Thess. 4, 4 **εἰδέναι ἕκαστον ὑμῶν τὸ ἑαυτοῦ σκεῦος κτᾶσθαι ἐν ἁγιασμῷ καὶ τιμῇ**; Cic. Tus. Disp. 1, 22, 52 *nam corpus quidem quasi vas est aut aliquod animi receptaculum*. Democritus often used **σκῆνος** of the body, a metaphor that is found in the N. T. also; see 2 Cor. 5, 1 **ἐὰν ἡ ἐπίγειος ἡμῶν οἰκία τοῦ σκήνους καταλυθῇ**. On the argument consult Zeller, 'Prae-Soc. Phil.' ii. 261–2: Ritter, 'Hist. of Anc. Phil.' i. 560–1; Zeller, 'Stoics, Ep. and Scep.' 2 edit. p. 455. **441. quam**: Marullus, Wakefield, Lachmann, for *cum*, which Munro in his 3d edit. retains. Trans. as if '*hanc*.' — **re**: 'cause.' **443. qui**: old abl. used as adv.; 'how.' **444. cohibessit**: irreg. perf. subj. from *cohibere*; with *is* Lachmann's emend. for *incohibescit*. How can the air, which is rarer than the body, hold the soul together?

(2) *The mind is born, reaches maturity, and shows signs of decay along with the body, hence must perish with it.* 445–458.

445 *et seq.* This argument has often been employed, and is the common property of materialists of all ages. Lord Bolingbroke used it; see Leland, 'A View of the Deistical writers,' etc. ii., 6; and so have many other writers that were not pure materialists. For an able discussion of this and the other arguments of Lucr. see James Baxter, 'An Enquiry into the Nature of the Human Soul,' vol. i. sect. 5.; consult also Burton, 'Anat. of Mel.' 1, 1, 2, 9 and references there given; Elliotson, 'Human Physiology,' p. 33 *et seq.* Cf. the 'Système de la Nature,' Part 1, ch. 13 (Wilkinson's trans.): "Everything proves, in the most convincing manner, . . . that it (the soul) cannot



be distinguished from the body; that it is born with it; that it grows up with it; that it is modified in the same progression; in short everything ought to make man conclude that it perishes with it. The soul, as well as the body, passes through a state of weakness and infancy; . . . arrived with the body at its full powers, having in conjunction with it reached maturity, it does not cease for a single instant to partake in common of its sensations, whether these are agreeable or disagreeable; . . . in an old man . . . alas! it sinks down with the body." As representing the view of modern materialistic evolution consult Haeckel, 'Nat. Hist. of Creation,' ii. 361–2: "With regard to the origin of the human mind or the soul of man, we, in the first place, perceive that in every human individual it develops from the beginning, step by step and gradually, just like the body," etc., etc. 453. **labat**: added by Lachmann. 456. **ceu fumus**: Munro compares Sextus Adv. Math. 9, 72 *καὶ καθ' αὑτὰς δὲ διαμένουσι καὶ οὐχ, ὡς ἔλεγεν ὁ Επίκουρος, ἀπολυθεῖσαι τῶν σωμάτων καπνοῦ δίκην σκίδνανται*; and Plat. Phaed. 70 *ὥσπερ πνεῦμα ἢ καπνὸς διασκεδασθεῖσα*. Cf. also below 598. 457. **quandoq.**: see n. to 1, 587. 458. **fessa fatisci**: found also 5, 308.

The following arguments (3–7) *are based upon the relation of soul and body and the analogy between them:*

(3) *As the body is racked with disease so is the mind with cares, grief, fear; like the former, then, the latter must partake of death.* 459–462.

(4) *In sickness of the body the mind often raves and goes into stupor; that which can be thus affected by disease must finally perish.* 463–475.

(5) *Drunkenness unsettles the mind; whatever can be unsettled, by a more violent cause may be destroyed.* 476–486.

(6) *In a fit the power of the mind is for a time lost; then, at the death of the body it must be lost utterly and forever.* 487–509.

(7) *The mind like the body may be cured by medicine; now curing involves the adding or taking away or changing about of parts; whatever allows a shifting of parts is mortal.* 510–525.

459. **Huc**: 'To this'; see n. to 1, 208. In illustration of the argument here edd. quote Cic. Tusc. Disp. 1, 22, 79 *alteram autem affert* (i.e., *Panaetius adversus animorum immortalitatem*) *rationem; nihil*

esse, quod doleat, quin id aegrum esse quoque possit; quod autem in morbum cadat, id etiam interiturum; dolere autem animos; ergo etiam interire. The reasoning is weak, as proof based on analogy often is; the pains of the mind are essentially different from those of the body. Of course the argument becomes valid if one accepts the "correlation and equivalence" of physical, vital, and mental forces, as stated, e g., by Herbert Spencer, 'First Prin.' § 71: but see Bowne, 'Phil. of Herb. Spencer,' p. 90 *et seq.* Consult Maudsley 'Body and Mind,' especially sect. 3 on the "relation of morbid bodily states to mental functions." **462. quoque**: i.e., of death as well as disease; with *esse* supply *eum*. De La Mettrie makes this line the conclusion of his 'Histoire naturelle de l'âme,' in which some of these arguments of Lucr. and many others against the soul's immortality, are set forth. **476. denique**: see n. to 1, 199. — **quor**: the older form of *cur*; as *o* passed into *u* the preceding *u* was dropped and *q* became *c*; so *quom* became *cum*, *equos ecus* etc. **479. tardescit**: found only here. **481. genere**: see n. to 1, 160. **482.** Observe the alliteration; see n. to 1, 14. **484. inque ped.**: tmesis. **486. aevo**: 'existence.' **493. agens an.**: 'while trying to drive forth his soul.' — **quasi . . . ferv.**: *quasi* in the sense of *quam ad modum* is not often found immediately with the indic. as here; usually the constr. is elliptical. A. 312; H. 513, II. The indic. is more vivid. **494. val. viribus**: cf. 1, 971; 451 above. **496. semina vocis**: the material nature of sound is shown 4, 524 *et seq.* **498. munita viai**: see n. to 1, 86; *munire* was the technical term for road-making. Munro explains the line as *qua consuerunt ferri et est illis munita via*, 'a regularly made road.' **500. seorsum**: see n. to 286. **501. veneno**: i.e., *vi morbi.* **502. reflexit**: neuter only here; *desipientia* (499) is not found elsewhere. **504. consurgit**: for subject refer back to 488 *aliquis.* — **omnis** is of course acc. pl. **506. haec**: i.e., *animus et anima.* **508-9**: cf. 443-4. **510. mentem sanari** etc.: in antiquity there were no asylums for the insane, and the unsound in mind had a hard lot. Some of the Greek physicians, however, made a study of mental diseases, and in a few things seem to have anticipated modern discoveries. Strange as it may seem, however, systematic investigation of insanity and the best methods of treatment, dates only from the latter part of the last century. The tendency of to-day is more and more to consider insanity a result of purely physical causes. But the poet's argument here is worthless;



because the cure of mental troubles is just as readily accounted for on the supposition that the mind is a spirit that manifests itself and acts through the medium of the body; when the body is diseased its manifestations are disordered, but when this becomes sound again they are righted. Medicine thus affects the body only, the mind not at all. Cf. Baxter, 'An Enquiry,' etc., i. 383 *et seq.* **513. traiecere**: an intermediate form between *traiacere* and *traicere*, several times found in MSS. — **aecumst**: see n. to 476. **514. hilum**: see n. to 220. Supply *illum* as acc. to *detrahere* and the preceding infinitives. **519–520.** Cf. 1, 670–1 and n. **521. mortalia**: i.e., indicating that it is mortal. On the position of *mortalia . . . docui* between the *sive . . . seu* clauses see n. to 1, 146. **524. eunti**: i.e., one proceeding to attack the doctrine. **525. ancipiti**: interpret from 521–2. — **refutatu**: found only here; for *refutatione*, like 1, 795 *commutatum* for *commutationem*. Lucr. is fond of these nouns in *-us*.

(8) *Often the body dies limb by limb; then the soul, divided, must go part by part away and be dissolved. If it is urged that as the body wastes away the soul can draw itself together into one place, that spot ought to be more sensitive than the rest; since nothing such is found to happen doubtless the soul perishes too. Nay, even suppose the soul can thus gather itself together; still it is mortal, since the dying body gradually loses all feeling and life.* 526–547.

526. Denique: as in 476. The argument is well refuted by Baxter, 'An Enquiry,' etc., i. pp. 423–5. — **ire**: 'pass away,' a rare use; akin to that with expressions of time; cf. 531, 578. **529. artus**: see n. to 151. **531. itque an. hoc**: Munro for *atque animo haec*; Lachmann writes *usque adeo haec*. — **hoc**: 'for this reason,' almost = *ergo*, Munro thinks. The argument rests upon the assumption that the soul is disseminated throughout the body and vitally connected with it. See 143 *et seq.* **538. qui**: i.e., *locus*. **541. dare**: 'admit.' **545. obbrut.**: *ob.* in composition often has the force of 'completely,' as here. **546. undique**: 'in every part.'

(9) *The mind is a part of man just as the ears and the eyes and the other senses; therefore it must, like them, when separated from the body, lose its functions and decay.* 548–557.

548. loco: i.e., *media regione in pectoris* of 140, where see n. **550. qui vitam cumque**: tmesis. **552. secreta**: see n. to 1, 194. —

esse : = *existere*. 553. **licuntur** : see n. to 476 *quor;* generally spelled *liquuntur*. 555. **vas** : see n. to 440; *quod* is of course the pron., and *illius* refers to *animus*. 556. **ei** : also refers to *animus;* 'or anything else you may prefer to imagine more intimately (i.e. than a vessel) connected with it.'

The three following arguments are properly one; they are given separately for convenience.

(10) *Body and soul can exist only in union; neither can continue in life without the other. Therefore when the body dies the soul also must perish.* 558–575.

(11) *Even when one still lives sometimes from a shock the soul is all but dissolved; a weightier cause would have destroyed it.* 576–586.

(12) *Outside the body, the soul being exposed and helpless could not exist a single moment of time, to say nothing of eternity.* 587–594.

558. **viv. potestas** : cf. 409; 1, 72 and n. 559. **valent** : in the pl. because *vivata potestas* is understood with *corporis; coniuncta* is neut. pl. 560 *et seq.* For the argument cf. Epicurus in Diog. Laert. 10, 24, 65–6 'The rest of the body, remaining either as a whole or in part, does not retain its feeling after the dispersion of that combination of atoms, whatever it may be, that forms the soul. Moreover, when the whole body is dissolved the soul is dispersed, and no longer has the same powers nor motions, so that it no longer has feeling. For it is inconceivable that the soul possesses feeling when not having those wonted motions in that organic system (formed by itself in union with the body), when its environment and surroundings are not such that in their midst it can retain those motions'; also, the 'Système de la Nature,' Part 1, ch. 13: "Indeed, by what reasoning will it be proved that the soul, which cannot feel, think, will or act but by aid of man's organs, can suffer pain, be susceptible to pleasure, or even have a consciousness of its own existence, when the organs that should warn it of their presence are decomposed or destroyed?" 564. **seorsum** : used as a prep. with the abl. in the sense of *se, sine* (deriv. fr. *se-vorsus, se-vortere*, old form of *vertere*) — the only passage where this constr. is found. See Roby, 2110. 565. **posse** : see n. to 1, 586. 569. **moventur** : reflexive, taking *motus* as Greek acc.; so *quos . . . moveri* below; cf. Hor. Ep. 2, 2, 125 *qui, nunc Satyrum,*



nunc agrestem Cyclopa movetur. See Madvig, 237, *a*, obs.; a full collection of examples is given by Kühner, 'Ausführ. Gram.' § 71, 3, c) (ii. 207). **573. corpus** etc.: 'for the air will be body and a living thing if' etc. The soul can have no feeling or sense without the body. ***animans***, in the broadest sense, includes both living beings and plants; as used by Lucr., and generally by classical writers, it refers only to the former, comprising both men and animals. Here it is used indefinitely, and is hence neuter. **576–90.** Transferred here from 592–606, a change the reason for which is obvious from the connection. **576. finis**: after *intra.* **579. supremo temp.**: i.e., *vitae.* — **voltus**: better spelling than *vultus* for the earlier authors, though *vultus* is sometimes found (cf. 3, 163), and is the form preferred by the dictionaries. **581. an. male factum**: 'it goes ill with the mind,' 'the mind is in bad way.' **583. repraehendere**: pronounced as four syllables; the *h* is ignored and *aee* are blended; cf. n. to 152. **585. haec**: fem. pl. **586.** Cf. 484 *et seq.* **589. aevom**: masc., as also in 2, 561, where the same phrase is found; cf. 5, 61. **591. etiam atque etiam**: see n. to 1, 295. **594. causa**: i.e., of destruction. — **duobus**: i.e., body and soul.

(13) *On the going away of the soul the body becomes putrid; the soul, therefore, must have come forth from its inmost fastnesses. That this does not escape as a whole the feeling of dying men testifies; hence it must itself be torn apart and ooze away through all the openings of the body.* 595–614.

597. coorta: 'gathering itself up.' Notice the coördination of phrase and single word in *ex imo penitusque.* **599–600.** The language is taken from the falling in of a building. **601. anima emanante**: Wakefield and Munro for *manant animaeque;* Lachmann has *manante anima usque.* **609. supera**: see n. to 1, 429. **611. quemque**: distributive apposition to *sensus*, with which *deficere* is to be supplied. *Sensus alios* Munro considers a Graecism, like 1, 116 *pecudes alias;* cf. e.g., Herod. 1, 216 ***θύουσί τε καὶ ἄλλα πρόβατα ἅμα αὐτῷ***; trans. 'the senses as well.' **614. vestem**: see n. to 386.

(14) *The fact that the mind has a particular fixed place in the organism shows that it is fitted to exist there, and nowhere else; for things are not found in existence outside of their proper relations.* 615–623.

615. animi etc.: for the synonyms see n. to 94. **616. unis**: the pl. of *unus* occurs also 5, 897. Neue (' Formenlehre,' ii. 144) gives over forty instances of this usage. **619-20** *et* [*redditum est cuique*] *ubi creatum possit durare atque* [*red. est cuique*] *esse* (= *existere*) etc.: *quicquid* = *quicque*; both *cuique* and *quicquid* are used in a general sense, without particular reference to the body. Trans. with Mayor: 'There is a law which appoints to each several thing its place of birth, its place to abide in, and its existing with such a manifold organization of joints that' etc. Munro, however, thinks *cuique* and *quicquid* refer to the parts of the body, and supposes after 619 two verses have been lost, which he thus supplies: *Certum ac dispositum naturae legibu' constat. Hoc fieri nostrum quoque corpus foedere debet, Atque* etc. **620. partitis**: Bernays and Munro for *pro totis*; Lachmann has *perfectis*. **623. fluminibus**: supply *in*.

(15) *If the soul is to exist by itself, it must needs have the five senses; but these cannot exist apart from the body.* 624-633.

626. fac. est: 'we must suppose.' **628. Acherunte**: see n. to 978. **629. pictores**: thus Polygnotus painted scenes from the descent of Ulysses to the Lower World on the walls of the court of the Cnidians at Delphi. — **scriptorum**: such as Homer. **630. intro dux.**: in the time of Lucretius the parts of many compounds had not fully coalesced. **631. sorsum**: for *seorsum*; 'apart,' i.e., from the body. **632. animae**: dat.; *esse* = *existere*. **633. auditu**: Munro, for *auditum*; at the best an awkward constr.; Lachmann and Bernays read *haud igitur*.

(16) *The soul permeates the entire body; when parts of this are cut off the soul must be severed, since there cannot be separate souls for every part; but whatever can be divided is mortal.* 634-669.

634 *et seq.* This and several other arguments of Lucr. are clearly stated by Tyndall, ' Fragments of Science,' 5 edit., p. 498 *et seq.* (Belfast Address). **635. totum**: supply *corpus*. — **animale**: almost = *animans*; cf. 2, 727 *animalia corpora*. **638. procul dubio**: see n. to 1, 812. **639. dissicietur**: = *disicietur* (less correctly *disjicietur*); *dissicere* for *disicere* is found a few times in MSS. of other writers. **640. quod**: pron.; supply *id* as subject to *abnuit*. The general principle stated in 640-1 has also often been employed

to prove the immortality of the soul. Whatever is divisible is perishable; the soul is not divisible, therefore it is imperishable. Cf. Cic. De Sen. 21, 78 *cum simplex animi natura esset neque haberet in se quicquam admixtum dispar sui atque dissimile, non posse eum dividi, quod si non posset, non posse interire;* also Plat. Phaed. 78–80. **642. falcif. currus**: see n. to 5, 1301. **643. de subito**: like 'of a sudden' in the colloquial phrase 'all of a sudden.' **644. videatur**: passive. — **artubus**: the old grammarians preferred this form of the abl. pl. of *artus* to distinguish it from *artibus* (*ars*). See n. to 1, 260. Lucr. is fond of the word *artus*. **647. in studio dedita**: not a common constr.; cf. 4, 815 *quibus est in rebus deditus ipse; dedere* is generally accompanied by a dat. **648. reliqüo**: see n. to 1, 560. — **petessit**: a rare verb; cf. 5, 810. '*petessere antiqui pro p e t e r e dicebant*' (Fest.). **649. tenet**: 'perceives.' — **tegmine**: i.e., the shield, which the soldier carried on his left arm. **650. abstraxe**: = *abstraxisse;* see n. to 1, 233. **651. alius**: supply *tenet*. **653. digitos**: like δάκτυλος, used more often of fingers than of toes. **657–8.** A corrupt and difficult passage; *micanti . . . cauda e*, Lachmann and Munro for *minanti . . . caude;* Lachmann has *serpentem* for *serpentis*, and *utrimque* for *utrumque*. Munro thinks a verse is lost after 658, something like *et caudam et molem totius corporis omnem*; with this added both sense and constr. are clear. *cauda* is abl. abs. with *micanti*. Without the added verse *utrumque* must refer to *lingua* and *cauda*. **660. ancisa**: found only here. **662. ipsam se**: obj. of *petere;* the mangled body and tail, as Munro explains. It is a common saying that when a snake is killed the parts quiver till sunset. **664. omnibus**: proleptic; belongs with *particulis*. **666. animantem**: see n. to 573. Notice the assonance, of which Lucr. is so fond, in *animantem animas*. **667. una**: predicative. **668. utrumque**: i.e., *corpus et anima;* trans. 'both.'

(17) *If the soul were immortal, memory ought to reach far back into the past before our birth. If, in being joined to the body, it suffered so great change as to blot out recollection, that surely was not far from destruction; the soul which then was must have perished, that which now is, have been created anew.* 670–678.

670 *et seq.* This argument rests upon the assumption that the soul to be immortal must have existed from eternity, — the doctrine of pre-

existence; see n. to 1, 113. **671. insinuatur**: see n. to 1, 113. **672. super**: = *insuper*, *praeterea*. See Holtze, 'Syn. Lucr. Lineamenta,' p. 101. **675. retinentia**: rare, perhaps found only here and 851 below. For the thought compare Wordsworth, 'Ode on the Intimations of Immortality from the Recollections of Childhood.' **678. interiisse**: supply *animam*.

The two following arguments are closely related, and also assume the doctrine of pre-existence:—

(18) *If the soul were introduced into man at birth, it would not pervade the entire body, but be gathered together in one particular spot, as in a hole by itself; whereas on the contrary the whole body, even to the teeth and bones, is sensitive.* 679–697.

(19) *Again, on the same supposition, in being thus diffused through the body, the soul must perish; just as food spreading throughout the frame perishes, and goes to form a new nature.* 698–712.

679. perf. corp.: i.e., when the body is fully formed, and ready to be born. **680. an. viv. potes**: see n. to 1, 72. **682. conveniebat**, etc.: *conv. vivere ita ut videatur cresse* (= *crevisse*) etc. **685.** "Clearly a sarcastic gloss;" rejected by Lambinus etc., but retained by Lachmann, who instead of *affluat* reads *arceat*. **689. morbus**: i.e., *dolor dentium*. **690. oppressus**: i.e., *dentibus*; 'crunched.'—**frugibus**: by metonymy for *pane*. **691–2.** That is, souls had a beginning, and must have an end, of life. **700. quique**: old abl., found only here and in the same phrase 5, 343; strengthens *magis*. The *qui* is probably the same as in *utqui*. See Munro's n. to 1, 755. **701.** The argument of the line is a good illustration of the *non sequitur*. **705. quamvis**: with indic.; see n. to 403.—**recens**: belongs with *corpus*. **710. illa**: i.e., *anima*.

(20) *Are particles of the soul left behind in the dead body or not? If so, the soul cannot be immortal, since it has been divided; if not, whence come the souls of the living things that appear in carcasses? These cannot come from without; for, do we suppose that while bodiless they hunted around and got bodies? A disembodied soul would have no motive for taking upon itself the ills and pains of existence in a body, and could not make for itself a body, even if it should so desire. Or do we imagine that they entered bodies fully formed? In that case, they would not be so closely connected with these as to have common feeling.* 713–740.



713 *et seq.* The argument rests upon belief in the spontaneous generation of worms and other forms of life in decaying bodies. Spontaneous generation is a necessary postulate of materialistic evolution. Within the past few years every effort has been made to show that it is not merely possible, but under certain conditions inevitable. In every test the appearance of organized life has been shown to be the result of the presence of germs; and the attempts to make protoplasm have utterly failed. The entire trend of scientific investigation goes to establish the old maxim, *omne vivum ex vivo.* Still, even to-day there are many who believe, as Lucretius did, that the carcass of itself goes over into worms. It is no uncommon thing to hear people say that they have seen horse-hairs become alive. Consult Huxley, 'Origin of Species,' sect. 3; Haeckel, 'Nat. Hist. of Creation,' ch. 13; Lange, 'Hist. of Materialism,' iii. 17 *et seq.;* Guthrie, 'Mr. Spencer's Formula of Evolution,' pp. 230-1; Bowne, 'Review of Herbert Spencer,' ch. 3; Elam, 'Winds of Doctrine,' ch. 5; Wainwright, 'Scientific Sophisms,' ch. 7; Flint, 'Anti-Theistic Theories,' p. 164 *et seq.* 713. **linquontur**: see n. to 476. The MSS. of Lucr. give also 714 *lincuntur;* 5, 1239 *relinqunt.* All these forms, Munro remarks, were probably in the MSS. of Lucr. within a generation after his death. 715. **haut erit ut possit**: periphrasis for *haud poterit.* Cf. the Greek idiom οὐκ ἔσται ὅπως κτλ. 717. **membris**: i e., *corporis.* 719. **viscere**: see n. to 1, 837. 721. **perfluctuat**: found only here. 723. **privas**: = *singulas;* trans. 'severally,' 'separately'; in this sense found only in the earlier writers. 725. **hoc**: subj. of *videatur.* **est**: almost = *fit;* cf. 715 and n. For examples of this use see Kühner, 'Ausf. Gram.' § 187 *d* (ii. 813-4). 726. **discrimen**: 'decision.' 727. **an. ven.** etc.: 'souls hunt out the several seeds of worms.' 728. **fabr. ubi sint**: i.e., *fabricentur domicilia* (*corpora*) *in quibus habitent.* 729. **corporibus**: of course *corp. vermiculorum.* 730. **faciant**: for the vicarious use see n. to 1, 667. — **laborent**: 'trouble themselves' to get into a form already made. 731. **suppeditat**: with *dicere* as subj.; almost = *potest;* a poetic and rare use. 732. **sollicitae**: see n. to 1, 343. 734. **mala**: a sort of cognate acc.; *fungor, fruor, utor,* and *potior* in the earlier writers sometimes have a direct obj. in the acc. 735. *sed tamen esto quamvis utile his* (*animis*) *facere corpus sibi.* 736. **cum subeant**: 'when they are going to enter.' — **possint**: i.e., *facere corpus* or *facere hoc.* In such expressions *facere* is often omitted. 738.

utqui: Munro for *ut quicum*. See n. to 1, 755. 739. **suptiliter**: see n. to 1, 79.

(21) *The distinctive traits of the different kinds of animals would not remain if the mind, like the body, did not come from fixed seed; for if souls passed from one body to another dogs might have the spirit of stags, hawks of doves, men might be brutish, and brutes wise. Grant that the soul goes from one body only into another of the same kind, the child ought to be wise with mature mind, the colt as well trained as the horse. Men may say that in a tender body the mind becomes weak; then since it has been so changed it must be mortal.* 741–768.

741. **triste . . . seminium**: 'sullen race' or 'breed.' 743. *a patribus datur et patrius pavor incitat artus* is rejected as a "manifest sarcastic gloss, which interrupts both sense and constr." 744. **cetera . . . hoc**: i.e., the fixed characteristics or dispositions of the different kinds of animals. 745. **generascunt**: found only here. 747 *et seq.* According to the view of Lucr., there is no qualitative or essential difference between the mind and soul of animals and the mind and soul of man. This, in fact, is a common tenet of believers in metempsychosis, materialists of all ages, and of evolutionists with materialistic tendencies. It was, perhaps, most fully unfolded by the French rationalists of the latter part of the last century; but Haeckel and those who share his form of the Doctrine of Descent insist upon it quite as strenuously as they. "If, as is usually done, we divide the different emotions of the soul into three principal groups, — sensation, will, and thought, — we shall find in regard to every one of them that the most highly developed birds and mammals are on a level with the lowest human beings, or even decidedly surpass them." Haeckel, 'Nat. Hist. of Creation,' ii. 364; cf. the rest of the chapter. The proof, however, is as conspicuously lacking as in the time of Lucr. Consult Bowen, 'Gleanings from a Literary Life,' pp. 328–350; especially St. George Mivart, 'Nature and Thought,' ch. 5; Pressensé, 'A Study of Origins,' Book 3; Hartley, 'Observations on Man,' Part. 1, ch. 2, § 8. 750. **Hyrcano**: Hyrcania was famous for its wild animals; cf. Mela, 3, 5; Verg. Aen. 4, 347. For the dogs Munro compares Cic. Tusc. Disp. 1, 25, 108 *in Hyrcania plebs publicos alit canes, optimates domesticos; nobile autem genus canum illud scimus esse.* 755. Cf. 670–8. 756. Cf. 701. 762–4. If the soul at the death of



one passes into the newly-formed body of another, the young ought to have the mental grasp and power of maturity. **762. stulta**: i.e., *anima*. 763 of the MSS. is the same as 746 above, and being obviously a sarcastic gloss is dropped out of the best texts. **764.** Implies an extension of the condition in 760 *sin* etc.: and if they shall say that the souls of horses go always into the bodies of horses etc. — **doctus**: 'trained.' **765. tenerascere**: this form is found only here; but *tenerescere* occurs in writings of the Empire. **766. confugient**: 'they will take refuge in the assertion.'

(22) *The mind would not reach maturity at the same time with the body, unless blended with it from the very beginning.* 769–771.

(23) *The going forth of the soul from an aged form implies the fear lest in the breaking down of the body it also perish; but what is immortal runs no risk of destruction.* 772–775.

772 quidve etc.: 'or what means it by going forth?' — **senectis**: the adjective is rare, and found principally in the earlier writers. **773. metuit etc.**: verbs of fearing, as those of willing, may be followed by the infin. with acc., or the subj. Here both constructions are found together, co-ordinated by *et*, the infin. clause expressing the thing, the *ne*-clause the event, that occasions the fear. **774.** Cf. 2, 1174.

(24) *It is laughable to think of immortal souls present in countless throng at conception and birth, wrangling to see which will get possession of the mortal body, — unless, perchance, they bargain to give way to the one that first comes.* 776–783.

779. innum. num.: so 2, 1054; cf. 2, 1086 *numero innumerali;* another instance of the play upon words of which Lucr. is so fond. — **praeproperanter**: found only here. **783. neque hilum**: see n. to 220.

(25) *To each thing its proper place has been assigned; thus the soul, fixed in the body, outside of this cannot exist.* 784–799.

(26) *To think that a mortal and an immortal nature can exist in union is foolishness, they are so utterly unlike and opposed to each other.* 800–805.

784-797. Repeated with slight change 5, 128-141. **787. quicquit** = *quicque;* cf. 1, 289. **790. posset . . . prius**: 'for this (which follows) would be much more likely to happen than that' (the existence of the soul apart from the body). Lachmann reads *Quid si posset enim? Multo prius* etc. Suppose the mind, instead of being located in the heart, were to be placed in the head or shoulders or any other part, still it would be in the body. **793. vase**: see n. to 440. **801.** *putare* (*mortale et eternum*) *posse consentire et fungi* etc. ***mutua*** has an adverbial force, as several times in Lucr. See Roby, 1096-7. **806-818** = 5, 351-363: "They here interrupt the argument, and are, of course, one of the many glosses with which some reader has wished either to explain or refute the poet by quoting his own verses for or against him, as the case may be." This passage has often been reckoned the twenty-seventh argument against the immortality of the soul, making the following the twenty-eighth.

(27) *But the soul may be thought immortal because it is protected from destructive agencies; on the contrary, it suffers not merely from the ills of the body, but also from cares and fears and other troubles of its own.* 819-829.

819. habendast: supply *anima.* **823.** After this verse a vs. seems to have been lost, which Lachmann thus supplies: *Multa tamen tangunt animam mala, multa pericla.* **824. praet. en. quam quod**: 'For besides that.' A like tmesis of *praeterquam* occurs in Cic. De Leg. 3, 19, 45.—**aegret**: found only here.

2. Conclusions based on the soul's mortality. 830-1094.

(1) *Since the soul is mortal, death is nothing to us; for the future will be to us as the past was before our birth. Even if the soul live after death we shall not, since our personality is made up by the union of soul and body. And if hereafter sometime the atoms of our body and soul shall so collect as to make a living form, we shall not exist, because the thread of identity will have been broken.* 830-869.

830 *et seq.* On the Epicurean view of death see p. **xxxv.**; consult also Ritter, 'Hist. of Anc. Phil.' iv. 87; Zeller, 'Stoics, Ep., and Scep.'

ch. 17 C (2). Cf. Epicurus in Diog. Laert. 10, 27, 125 'Therefore the most dread-inspiring of all evils, death, is nothing to us; for when we exist death is not present to us, and when death is present, then we are not in existence. It does not concern, then, either the living or the dead; for to the living it has no existence, and the dead do not themselves exist.' Cf. also the second of the **Κύριαι δόξαι** (Diog. Laert. 139 **B′** and Sext. Pyrrh. 3, 229): **'Ο *θάνατος οὐδὲν πρὸς ἡμᾶς· τὸ γὰρ διαλυθέν, ἀναισθητεῖ· τὸ δὲ ἀναισθητοῦν, οὐδὲν πρὸς ἡμᾶς.*** **832. aegri**: gen. after *nil.* **833–842.** Just as we felt no dread or pain when all the world was trembling with the struggle between Rome and Carthage, so in the future we shall feel no hurt or pang even though earth and sky and sea shall crash with mingling doom. With true art the poet clothes his argument in the most striking illustration he could have used. The Punic wars were just beyond the lifetime of himself and his contemporaries, and marked the most critical period of the Roman state up to his time. **836. fuere**: supply *homines.* — **utrorum**: i.e., *Carthaginiensium an Romanorum.* **837. humanis**: for *hominibus.* **839**: **uniter**: Lucretian word; 'into one,' 'in one,' 'together'; found also below 846; 5, 555; 5, 558. **843. sentit**: takes its subject from the *postquam*-clause, to which also *nostro de corpore* belongs. As a supposition contrary to reality generally takes the subjunctive, the indic. here is very forcible. **845. comptu**: 'the uniting'; found only here. Cf. n. to 1, 950.

847 *et seq.* Munro quotes a striking passage from St. Aug. De Civ. Dei, 22, 28 *mirabilius autem quiddam Marcus Varro ponit in libris, quos conscripsit de gente populi Romani, cuius putavi verba ipsa ponenda. 'Genethliaci quidam scripserunt,' inquit, 'esse in renascendis hominibus quam appellant* **παλιγγενεσίαν** *Graeci; hoc scripserunt confici in annis numero quadringentis quadraginta, ut idem corpus et eadem anima, quae fuerint coniuncta in homine aliquando, eadem rursus redeant in coniunctionem.'* **851. repetentia**: so MSS. B; other MSS. *repentia.* Lach. has *retinentia* after Avancius; *nostri* is Lachmann's reading, after Pius and Gifanius. *Repetentia* is elsewhere found only in Arnobius, a constant imitator of Lucr. Tr. 'the recollection of ourselves.' **852. nobis**: not properly 'ourselves,' because the thread of conscious existence has been severed, but those in the past made up of the matter of which we are now composed. **853. illis**: supply *nobis.* **854. cum respicias**: *cum* 'whenever,' 'as often as,' having a kind of conditional force, is found with the subjunctive, especially with the

subj. of the indefinite second pers. sing. See Madvig, 359 and **370**; *possis* in 856 is, of course, potential subj. **857–8.** ***haec eadem semina, e quibus nos nunc sumus, ante fuisse posta (posita) in eodem ordine ut*** (= *in quo*) ***nunc sunt.*** For the thought cf. n. to 1, 823–6. **857. semina**: i.e., *semina rerum*, atoms; see n. to 1, 55 *primordia.* **859. memori . . . mente**: for *memoria*, which is not found in Lucr. He uses *memor* only in connection with *mens.* — **repraehendere**: see n. to 583. **860. inter enim iacta**: tmesis. **861. deerrarunt**: see n. to 1, 43 *desse.* — **sensibus**: 'sensations.' **862–5.** ***enim cui male possit accidere, si forte misere aegreque futurumst, ipse debet esse*** (= *existere*) ***in eo tempore tum*** (*cum male potest accidere*). To suffer one must needs exist at the time of suffering. **864. id**: ***tempus in quo potest male accidere;*** i.e., of course, existence after death. — **probet**: contr. for *prohibet;* so Bernays and Lachmann; others have ***prohibet;*** *esse* = *existere.* **867. miserum**: supply *illum.* **868. differre anne ullo**: Munro for *differre annullo anullo;* Lachmann reads *differre ante ullo.* — **ullo tempore**: i.e., any different time from that in which he was born. Lambinus cites and Munro quotes a striking expression from Athenaeus 8, p. 336 C **θνητὸς ὁ βίος . . . Ὁ θάνατος δ' ἀθάνατός ἐστιν, ἂν ἅπαξ τις ἀποθάνῃ.**

(2) *Of no import is it to the living what may happen to the body after death.* 870–893.

870. **ubi videas**: cf. 854 *cum respiceas* and n. — **indignarier**: see n. to 1, 207; *indig. se ipsum* 'bewail himself,' i.e., bewail his fate. **871. posto**: for *deposito*, referring to the laying of the body away in the grave. In Lucretius' time cremation was more common than interment of the body; but according to Cic. Leg. 2, c. 22 the custom of burial was older, and was still adhered to by some prominent families, as those of the Cornelian gens. The sarcophagi of the Scipios are among the most interesting remains of the Republican period. Consult Becker, 'Gallus,' exc. sc. 12; Dict. of Antiq. art. *Funus.* **873. sincerum**: classed as an adv. acc., but strictly speaking a cognate acc. — **sonere**: see n. to 156. The metaphor in ***sincerum sonere*** is drawn from the sound of metals, and suggests the English expression 'has the right ring to it.' **876.** 'He does not, methinks, really grant the conclusion which he professes to grant, nor the principle on which he so professes.' **877.** The man, that is, does not succeed

in ridding himself of the idea that he will somehow live, wholly or in part, after death. **878. facit**: see n. to 1, 655. — **esse . . . super**: = *superesse*. **880.** On the order of the words (*coniunctio*) see n. to 1, 146. — **in morte**: = *post mortem*. **881. illim**: i.e., from the body, or the life of the body. **882. removet**: supply *se*. — **illum**: properly *illud*, but attracted to the masc. form by the relation with *se*. The man, unable to grasp the idea that after death he will wholly perish, imagines himself to be the dead body, and thus thinks of that body as possessed of feeling. **883. sensu . . . astans**: 'and stands by and impregnates it with his own sense.' **885. alium se**: 'other self.' **886 se**: 'his own self'; so *se* in 887. **888.** This dread of being torn in pieces by animals, common to both Greeks and Romans, had its origin in the common belief that in case the body were not properly disposed of the soul would have to wander a hundred years before finding its proper place in Hades. It stands in marked contrast to the custom of the barbarous Hyrcanians; Cic. Tusc. Disp. 1, 45, 108 *in Hyrcania plebs publicos alit canes . . . sed pro sua quisque facultate parat a quibus lanietur, eamque optumam illi esse censent sepulturam.* **889. qui**: see n. to 1, 168. **890. torrescere**: found only here. **891. in melle situm**: honey was sometimes used for embalming. See Lambinus' note. **892. summo aequore saxi**: "probably denotes the bottom of the sarcophagus on which the embalmed body was laid out," Munro remarks; "but bodies were sometimes stretched on the bare rock out of which the tomb was hewn, as proved by many ancient tombs that have been opened; or it may refer to a stone bed like the *lecti mortuarii* of the Etruscans." — **aequore**: used with reference to a hard, polished surface 4, 107 and 290; cf. 1002 below. **893.** This line refers simply to the common mode of burial in the earth; though some have thought that the poet had in mind the death of criminals by sinking them in a marsh with hurdles or crates of earth above, — a kind of punishment practised by the Carthaginians. Tacitus mentions a like mode of punishment as common among the early Germans.

(3) *'Home, wife, children, life's joys thou wilt not have in death.' No, nor will there be any yearning for them.* 894–903.

(4) *'To thee, indeed, death may be a painless, everlasting sleep; but we for thy loss have pain unending.' Nay, if death is slumber, grieve not for the dead.* 904–911.



894–6. Cf. the stanza of Gray's 'Elegy': —

> "For them no more the blazing hearth shall burn,
> Or busy housewife ply her evening care;
> No children run to lisp their sire's return,
> Or climb his knees, the envied kiss to share."

Edd. here compare also Georg. 2, 523–4 *Interea dulces pendent circum oscula nati; Casta pudicitiam servat domus.* **896. praeripere**: the infinitive, expressing purpose, is sometimes found after a verb of motion in Plautus, Terence, and Lucretius, and rarely in the Augustan poets. **897. factis flor.**: 'prosperous doings.' **898. misero misere**: *misero* is drawn from its natural position near *tibi*, for the sake of the assonance, of which Lucr. is so fond. Cf. nn. to 666, 779. **899. dies**: i.e., *mortis*. **900. illud**: see n. to 1, 80. **906. cinefactum**: 'turned to ashes' according to Nonius, a signification which Lachmann decides cannot be correct. Munro renders 'turn to an ashen hue'; the meaning seems to be that the bereaved stood weeping near the funeral pyre and gazed on the body as it was gradually consumed. taking on the color of ashes. — **busto**: the funeral pyre; connected with *com-bu-ro*. *Bustum*, says Festus, *proprie dicitur locus in quo mortuus est combustus et sepultus.* **908. dies**: see n. to 1, 233. **909. hoc**: the weeping relative or friend who has just spoken. — **amari**: from *amarus*.

(5) *Men at their cups cry out, 'brief is this pleasure, enjoy it ere it goes beyond recall'; as if thirst or any desire could follow them in death. In sleep there is no thought of self or life; so even more in death, in which there is a more thorough scattering of the matter of us.* 912–930.

912. discubuere: i.e., *in conviviis*. **913. inum. ora**: chaplets of leaves and flowers were worn at the drinking-bouts as an antidote against intoxication; *ora*, 'brows.' **914. homullis**: with the diminutive is associated the idea of 'insignificant,' 'of no account.' The thought is, 'enjoyment is brief, hence take advantage of it'; like "eat, drink, and be merry, for to-morrow we die," the motto of most Epicureans. This doctrine Lucretius, true to the old Roman philosophy of life, visits with stern censure. Herein he stands in marked contrast with Horace, who would fill each day with pleasure; see Od. 1, 9 and 11; 3, 29 etc.; Martha 'Lucrèce,' p. 159 *et seq.*; also Munro's n. **915. iam fuerit**: 'presently it will have been.' **916. cum**



primis: see n. to 1, 130. **917. torres**: the fem. is found only here; *torris* masc. is common. Tr. 'dryness.' **918. aliae**: fem. gen., a rare form. — **rei**: scanned as one syllable; so also 4, 885. Cf. nn. to 1, 688; 5, 102. **919. requirit**: 'feels the want of.' **921. per nos**: idiomatic, 'for all we care'; cf. Cic. Ad. Fam. 7, 32 *Trahantur per me pedibus omnes rei.* **923. et tamen**: see n. to 1, 1050. **926-7.** Death is less to us than sleep, if there can be a less than nothing. The Epicureans thought that in sleep a portion of the soul left the body. Literature is full of passages based upon the likeness of death to sleep. The conception of sleep, as the brother of death, goes back as far as Homer; see Il. 16, 682; Shelley, 'Queen Mab,' 1st stanza; Lessing, 'How the Ancients represented Death.' Cf. Cic. De Sen. 22, 80 *iam vero videtis nihil esse morti tam simile quam somnum;* Id. Tusc. Disp. 1, 38, 92 *quid curet autem, qui ne sentit quidem? habes somnum imaginem mortis eamque cotidie induis, et dubitas quin sensus in morte nullus sit, cum in eius simulacro videas esse nullum sensum?* Both Lucretius and Cicero seem to have been thinking of the heavy, dreamless sleep, and were not troubled with the apprehensions that vexed Hamlet: —

> "To die, — to sleep: —
> To sleep! perchance, to dream: ay, there 's the rub;
> For in that sleep of death what dreams may come,
> When we have shuffled off this mortal coil,
> Must give us pause."

Cf. the 'Système de la Nature,' part 1, ch. 13: "But does not a profound sleep help to give him a true idea of this nothing? Does not that deprive him of everything? Does it not appear to annihilate the universe to him, and him to the universe? Is death anything more more than a profound, a permanent sleep?"

(6) *What could we say, save that her cause is just, if Nature should thus address us: 'Why, O mortal, grieve that thou must die? If a glad life has been thy lot, why not depart content? if life is irksome, why not end it? Shouldst thou never die there is nothing new in store for thee.' If an old man should mourn at death, would she not rightly chide? — 'Hence with thy tears, trifler! Thou hast let thy life slip away a failure, the fault is thine own; make room for others.' To none is life given in perpetuity. As the past was before our birth, so shall the future be after death.* 931-977.



931. rerum natura: see n. to 1, 21. For a similar discourse of Nature, suggested probably by the present passage, see the 'Système de la Nature,' the last chapter; also Lange, 'Hist. of Materialism,' ii. 122–3. **932. mittat**: see n. to 1, 572. **936. pertusum in vas**: the daughters of Danaus for the killing of their husbands were said to have been allotted in Hades the punishment of pouring water forever into jars full of holes; see Ov. Her. 14; Hor. Od. 3, 11, 25; Tib. 1, 3, 79. Hence a proverb seems to have been derived, *congerere* (*ingerere*) *in pertusum dolium* (*vas*). Cf. Plaut. Ps. 1, 3, 135. **938–9.** Cf. Hor. Sat. 1, 1, 117–9.

> inde fit ut raro qui se vixisse beatum
> dicat, et exacto contentus tempore vita
> cedat uti conviva satus, reperire queamus.

940. quae . . . cumque: tmesis. *Frui*, like *fungi* and compounds (so *perfunctus* 956 below), in prae-Ciceronian writers is sometimes construed with the acc. **943.** Supply *cur*. Cf. n. to 81. **944–5.** Cf. Cic. De Sen. 23, 85 *nam habet natura, ut aliarum omnium rerum, sic vivendi modum*; Id. ib. 21, 76 *omnino . . . rerum omnium satietas vitae facit satietatem*; Eccles. 1, 9: "The thing that hath been, it is that which shall be; and that which is done is that which shall be done; and there is no new thing under the sun"; M. Aurel. Ant. Med. 7, 1. Juvenal, with different underlying thought, exclaims, —

> nil erit ulterius, quod nostris moribus addat
> posteritas: eadem cupient facientque minores.

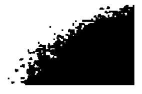
948. **saecla**: see n. to 1, 202. **950–1.** The form of expression is taken from the law; *intendere litem* is 'to bring in a charge' against one; *causam* is like our "case." **956. perfunctus**: see n. to 940. **959. nec**: = *non*, as in the legal phrase *res nec mancipi*, *nec manifestum*, *neg-otium*, *negligere* etc. **961. aliena tua aetate**: 'unsuited to thy time of life'; for the abl. cf. Cic. de Off 1, 13, 41 *homine alienissimum*. Lucr. has *alienus* also with the gen. (3, 821; 6, 69; 6, 1065), and once with the dat. (6, 1119). **962. agedum**: an early correction, adopted also by Lachmann and Bernays, for *agendum* of MSS. — **magnus**: for *magnis* of MSS.; Lachmann reads *dignis*; Bernays *gnatis*. The reading *magnus* is at best awkward; the meaning is 'in a manner befitting a great-souled person,' 'with dignity.' **964–5.** Cf. 1, 263–4 and n. **966. nec quisquam**: the matter of which a



man is composed does not perish, but "is used for the growth of other things," as Munro explains. **967. opus est**: cf. 1, 1051 and n. **970. alid**: see n. to 1, 263. **971. mancipio**: *manc.* and *usu* are both legal terms. *Mancipium* (*manus-capio*) was the name of the formal process by which, in the presence of witnesses, the absolute ownership of certain kinds of property was transferred from one Roman citizen to another. It was somewhat like the livery of seizin of the feudal and English law, giving the right which in the case of landed property corresponded to the English 'fee-simple.' *Usus* denoted the right of one person to enjoy the products and increase of property the ownership of which remained in the hands of another. It limited the possessor, however, to the enjoyment of the things necessary to life; while the *usufructus* assigned to him all fruits, both natural and civil. Munro suggests that *usu* is "put with poetical brevity for *usufructu*." Tr. 'usufruct.' See Mackenzie, 'Roman Law,' Part 2, ch. 2 and 6. *manc.* and *usu* are of course datives; for the form of *usu* see n. to 5, 101. **972** *et seq.* Cf. 'Letters on the Laws of Man's Nature and Development,' by Mr. Atkinson and Miss Martineau, quoted by Flint, 'Anti-Theistic Theories,' p. 101: "We ought to be content that in death the lease of personality shall pass away, and that we shall be as we were before we were — in a sleep forevermore." See also, Zeller, 'Stoics, Ep. and Scep.' ch. 17, c, (2).

(7) *Hell with its terrors is a myth; but all its woes and punishments are found in the present life.* 978–1023.

978. Acherunte: *Acheruns* was in early writers a favorite spelling, though *Acheron* is nearer the Greek (Ἀχέρων). **981. Tantalus**: he was said to be placed in the midst of a lake with branches laden with the most inviting fruits just over his head; but tormented with thirst and hunger forever, — for water and fruit withdrew whenever he tried to reach them, and a rock threatened every moment to fall and crush him. **984. Tityon**: a giant, punished in Tartarus for insult to Artemis; his form stretched over nine iugera, and two vultures preyed on his liver. **988. qui**: concessive. **989. optineat**: see n. to 1, 79. **992. nobis**: see n. to 1, 673 *tibi.* **993. volucres**: i.e., *angor* and *curae.* **994. cuppedine**: see n. to 1, 1082. **995. Sisyphus**: he was compelled to roll up a mountain a vast rock which t[illegible] all his strength; and which, as soon as it reached the



top, rolled back again. **996-1002.** No age and nation ever presented more sad or striking examples of disappointed political ambitions than Rome in the lifetime of Lucretius and a couple of decades later. **1001. rusum**: archaic for *rursum, rursus*. **1002. aequora**: see n. to 892. **1005. circ. cum red.**: edd. notice the similarity of the expression to the Homeric *περιπλομένων ἐνιαυτῶν*. **1008-9.** See n. to 936. **1010. potestur**: see n. to 1, 1045. **1011. egestas**: Lachmann has *egenus*, the common reading of the old editions, against the MSS. After 1011 Munro supposes some verses have been lost, and marks a hiatus in his text. **1015. insignis**: agrees with *metus*; for the paronomasia see n. to 666. — **luella**: see n. to 1, 39. The word is found only here. **1016. saxo**: traitors and false swearers were hurled from the Tarpeian Rock. Cf. Hor. Sat. 1, 6, 39. **1017. robur**: the inner dungeon of the *carcer*, or state prison. The *robur Tullianum*, so named because tradition ascribes the building of it to Servius Tullius, formed the lowest vault of the Mamertine prison at Rome, and still remains. Sallust Cat. 55 thus describes it: *est in carcere locus, quod Tullianum appellatur, circiter duodecim pedes humi depressus. eum muniunt undique parietes atque insuper camera lapideis fornicibus vincta; sed inculta tenebris odore foeda atque terribilis eius facies est.* — **pix**: slaves were sometimes punished by pouring boiling pitch on them. This, perhaps, is the historical antecedent of the barbarous custom of tarring and feathering. — **lammina**: i.e., *lamminae ardentes*, the hot plates of metal used to torture slaves. **1018. factis**: dat. with *conscia*; trans. as if *factorum*. **1021. finis**: see n. to 1, 107. **1022. haec**: proleptic; cf. 1, 950 and n.

(8) *Thus mayest thou console thyself about death: the good, the mighty, and the wise have passed away; wilt thou dread to die, whose life goes on wavering in the midst of fears and cares?* 1024-1052.

1025. The line is from the Annales of Ennius, 150 *Postquam lumina sis oculis bonus Ancus reliquit* (Vahlen). Cf. Shirley, "Death lays his icy hand on kings." Edd. compare Il. Φ 107 *κάτθανε καὶ Πάτροκλος ὅ περ σέο πολλὸν ἀμείνων*. — **sis**: *suis*; the *u* of the stem in *tuus* and *suus* was sometimes omitted; hence *tis* (*tuis*), *sos* (*suos*) and the like. See Neue 'Formenlehre,' ii. 189. — **Ancus**: i.e., Ancus Martius, the fourth king of Rome; his virtues were often extolled. **1026. improbe**: explained by Munro as *ἀναιδής*, immoderate in ex-



pectation. **1028. occiderunt**: see n. to 1, 406. **1029. ille**: Xerxes. Cf. Juv. Sat. 10, 173–184, and Mayor's n. **1031. lucunas**: so in MSS. of Lucr. here and 6, 538 and 552, instead of *lacunas*. **1034. Scipiadas**: for the form see n. to 1, 26 *Memmiadae;* Roby, 475 (*c*). The reference is to P. Cornelius Scipio Africanus Maior, the conqueror of Hannibal; though the expression *Carthaginis horror* would suit also P. Cornelius Scipio Aemilianus Africanus Minor who ended the third Punic war. Cf. Verg. Aen. 6, 844 *geminos, duo fulmina belli, Scipiadas, cladem Libyae.* **1035. proinde ac**: = *tamquam.* **1037. Heliconiadum**: the muses, so called from Mt. Helicon in Boeotia; see n. to 1, 118. — **Homerus**: uniformly considered in antiquity the prince of poets. To-day it is thought by many that this distinction belongs to Shakspere alone. **1038. sceptra**: the acc. with *potiri* is rare in classical writers. — **aliis**: dat. after *eādem;* the same constr. is found also 2, 919 and 4, 1174. Roby (1143, 6) gives three other instances of this rare usage. **1040. memores**: see n. to 859. **1041. sponte sua** etc.: there are conflicting statements as to the manner of Democritus' death. Diogenes Laertius gives us to understand that he died of natural causes at the age of a hundred and nine (9, 43); and the assertion that he put an end to his life is by no means established. See Zeller, 'Prae-Soc. Phil.' ii. 214, n. **1042. obit**: = *obiit.* — **decurso lumine vitae**: a striking mixture of metaphors. **1043–4.** Cf. n. to 3, 3. **1045.** Cf. Shirley, 'The Last Conqueror': "Death calls ye to the crowd of common men." **1048. somnia**: 'visions.' **1049. sollicitam**: cf. n. to 1, 343.

(9) *If men could but see the cause of the burdens and cares of life as clearly as they feel these, they would not be constantly trying by change of scene to make life happy; they would devote themselves to the study of Nature, to see what is to be their state not for an hour but for all time.* 1053–1075.

1059. commutare locum: cf. Hor. Od. 2, 16, 17–8:—

> quid brevi fortes iaculamur aevo
> multa: quid terras alio calentes
> sole mutamus?

1063. mannos: small horses from Gaul, used principally for pleasure-driving. **1068. at quem** etc.: 'but self from whom, as is commonly the case, he cannot escape, clings to him in his own

despite.' Cf. Hor. *ut sup.* 19 *patriae quis exul Se quoque fugit?* also Sen. De Tranquil. Animi 2, 14. **1070. morbi** etc.: cf. n. to **1, 112**; also the 'Système de la Nature,' Part 1, ch. 13: 'The fears of death are vain illusions, that must disappear as soon as we learn to contemplate the necessary event from its true point of view." **1071. rebus**: i.e., *rebus aliis omnibus,* as Lambinus explains. **1072.** Cf. the vss. of Verg. quoted in n. to 37. **1075. quae . . . cumque**: tmesis; see also n. to 1, 1043.

(10) *Why, in the midst of ills and dangers, do we so yearn for life? Die we must, and living long can bring us no new pleasure; but it is uncertain what lot may come. In comparison with the eternal death before us, it matters not whether we die soon or late.* 1076–1094.

1080–1. Cf. 944–5 and n. In the Epicurean view there was no use in living when life no longer had any pleasures. **1083. aliut**: see n. to 1, 469. **1084. hiantis**: supply *nos.* **1087. nec . . . hilum**: see n. to 220. **1089. perempti**: 'in the condition of the dead.'



BOOK V.

INTRODUCTORY, 1–90.

1. Laudation of Epicurus. 1–54.

Who can praise right worthily these discoveries of true reason? He was a god that found and showed the way of life. Nought to compare with this boon has been bestowed on men by others, — not by Ceres giver of grain, nor by Bacchus discoverer of wine; no, not by Hercules, for the monsters slain by him were far off and could be shunned. But he who has subdued and cast forth from the soul its cares and fears, who has revealed to us even the nature of the immortal deities, is he not in truth a god? 1–54.

1. **pectore**: 'thought'; cf. 1, 413, and see n. to 3, 140. 2. **pro mai.**: after *dignum*, an infrequent constr. — **repertis**: see n. to 1, 136. 4. **eius**: Epicurus. For the spirit and significance of the passage see n. to 3, 3 *te*. 6. **nemo**: i.e., no one able to do that just spoken of. 8. **deus ille**: cf. the words of the Epicurean, Cic. N. D. 1, 16, 43 *ea qui consideret quam inconsulte ac temere dicantur, venerari Epicurum et in eorum ipsorum* (i.e. *deorum*) *numero, de quibus haec quaestio est, habere debeat;* also Tusc. Disp. 1, 21, 48 *quae quidem cogitans soleo saepe mirari non nullorum insolentiam philosophorum, qui naturae cognitionem admirantur eiusque inventori et principi gratias exsultantes agunt eumque* (*Epicurum*) *venerantur ut deum; liberatos enim se per eum dicunt gravissimis dominis, terrore sempiterno et diurno et nocturno metu;* cf. Lact. 3, 14. — **inclyte**: see n. to 1, 40; cf. 2, 1080. The spelling *inclutus* is more common. — **Memmi**: see n. to 1, 26. 9. **princeps**: =*primus;* see n. to 1, 94. — **vitae rat.... sapientia**: it was the practical, ethical aspect of philosophy that

appealed to the Romans. Speculation for its own sake met with no encouragement among them. Cf. 1, 146–8 and n. With 10 edd. compare Enn. Ann. (Vahlen) 227:

> nec quisquam sophiam sapientia quae perhibetur
> in somnis vidit prius quam sam discere coepit;

where as in 10 and Hor. Od. 1, 34, 2 *sapientia* is used for *philosophia.* 11 For the arrangement of words cf. 1, 22–3 and n. 14. Notice the double alliteration in *fer. fru.* and *Lib. liq.;* see n. to 1, 14.— **Liber**: sometimes called by the Greeks εὑρετὴς ἀμπέλου. 15. **vitigeni**: cf. 6, 1072 *vitigeni latices; vitigenus* is Lucretian for *vitigineus.* — **instituisse**: ambiguous; "is it merely 'introduced and set up,' as Cic. ad Fam. 13, 48 *ea te instituere quae sequantur alii;* or does it imply the planting also of the vine and sowing of the corn, as Cic. de Lege Agr. 2, 67 *iugera* CCC, *ubi institui vineae possunt?*" Munro inquires. The former interpretation seems to me more in harmony with the context. 17. **gentis**: on the form see n. to 1, 7. Lambinus refers to Diodorus Siculus lib. 5 for an account of some peoples ignorant of grain and wine. Consult Morgan, 'Ancient Society,' Part 1, ch. 2. 20. **per magnas** etc.: Epicureanism became widely disseminated, especially in Italy, at a comparatively early date. A chief reason assigned for its popularity is, that its doctrines could be readily understood; but doubtless the fact that it made pleasure the standard of action appealed to many. Cf. Cic. De Fin. 1, 7, 25 *quaeritur saepe cur tam multi sint Epicurei; sunt aliae quoque causae, sed multitudinem haec maxime adlicet, quod ita putant dici ab illo, recte et honesta quae sint, ea facere ipsa per se laetitiam, id est voluptatem;* also Id. Tusc. Disp. 4, 3, 7 (*Epicurei*) *Italiam totam occupaverunt, quodque maximum argumentum est non dici illa subtiliter, quod et tam facile ediscantur et ab indoctis probentur, id illi firmamentum esse disciplinae putant.* Cf. n. to 336–7.

22. **Hercules**: here follows a comparison between the victories of Hercules and those of Epicurus. Eight of the labors of Hercules are referred to, the slaying of the Nemaean lion, the capture of the Erymanthian boar, the bringing of the Cretan bull to Erystheus, the destruction of the Lernean hydra, the fetching of the oxen of Geryon, the driving away of the Stymphalian birds, the taking of the flesh-eating mares of the Thracian Diomede to Mycenae, the finding and carrying off of the golden apples of the Hesperides. For full ac-

count of these labors consult the various mythologies, and Smith's 'Dict. of Biog. and Myth.' article "Heracles," with the original authorities there cited. — **antistare** : i.e., *antistare factis Epicuri*. 24. **Nemaeus**: nom. where the gen. with *leonis* might have been expected; see n. to 1, 771. 25. **Arcadius**: so called because the Erymanthian mountains, which the boar haunted, were in Arcadia. Another tradition, however, places the scene of the hunt in Thessaly. 27. **posset** : see n. to 1, 586. 28. **tripectora** : found only here. — **Geryonai** : see n. on 1, 29 *militiai*. There are two forms of the nom., *Geryon* 3rd decl. and *Geryones* 1st decl.; the former is more common. After 28 a verse has doubtless fallen out; Munro suggests

quid volucres pennis aeratis invia stagna,

and transposes 29–30 of the MSS. 29. **colentes** : construe with *volucres* of the line supplied by Munro. Lachmann tries to mend the constr. by reading *et aves* in place of *nobis*, and transposing 30–31. 31. **Thracis** : gen., with *Diomedis*. — **propter** : postpositive, as often; cf. n. on 1, 66 *contra*. 33. **acerba tuens** : cf. Verg. Buc. 3, 8 *transversa tuentibus hircis;* Macrobius (Sat. 6, 1, 30) compares Verg. Aen. 9, 794 *asper acerba tuens, retro redit;* cf. also Aen. 6, 467 *torva tuentem*, the Homeric ὑπόδρα ἰδών, as Conington suggests. With the constr. of *acerba* cf. 5, 1100 *mutua;* the neu. pl. acc. of adjectives is sometimes used adverbially. 35. **pelage** : Greek pl., found only here and 6, 619. Lucr. has also *mele* as pl. of *melos* 2, 412 and 505.— **sonora** : Lachmann with several early edd. for *severa*, which to me seems a good and forcible reading. 36. **quisquam** : substantive, as generally. Cf. 1, 1077 and n. — **audet** : supply *adire* from *adit*. 37. **cet. de gen. hoc** : a favorite expression of Lucr., imitated by Hor. Sat. 1, 1, 13. For *genere* cf. n. to 1, 160 *genus*. 38. **sei** : see n. to 1, 1114. 39. **ita** : 'as it is.' — **ferarum** : gen. with *scatit*, like 5, 1162 *ararum compleverit;* so 6, 890 *fons, dulcis aquai qui scatit*. 40. **scatit** : *scatĕre* is an anteclassical form of *scatēre*. 43. **purgatumst** : see n. to 1, 10 *patefactast*. — **proelia** : for constr. see n. to 1, 111 *poenas*. 45. **cuppedinis** : see n. to 1, 1082. 48. **desidiae** : the pl. of abstract nouns is often used to denote 'instances' or 'kinds' of the quality; A. 75, *c;* G. 195 Rem. 5; H. 130, 2; trans. 'forms of sloth.' 51. **divom** : see n. to 1, 1. For the thought cf. Cic. N. D. quoted in n. to 8. — **dignarier** : for the form see n. to 1, 207.

22



53. **immortalibu'**: see n. to 1, 159 *omnibu'*. — **de divis etc.**: notice the alliteration. Epicurus left a work on the Nature of the Gods entitled, according to Diogenes Laertius (10, 27), **Χαιρέδημος, ἢ Περὶ θεῶν.** His doctrine is fully set forth Cic. N. D. 1, 16, 42 *et seq.* — **suërit**: see n. to 1, 215. **54. rerum naturam**: see n. to 1, 21.

2. Subject and purpose of the Book. 55-90.

In his footsteps following, while I teach the fixed laws of being and have shown that the soul is mortal, whence too those images come in sleep that make us think the dead still live; now I must explain how that the world had a beginning and is doomed to perish; in what way, too, the gathering of matter formed earth, sky, sea, stars, sun, and moon; how living things came into being; how speech arose; how fear of the gods stole into the hearts of men; and how nature guides the on-going of the sun and moon, that we may not think the gods have aught to do with this, and bow in dread before them. 55-90.

55. **cuius**: refers of course to Epicurus. **56-8.** See n. to 1, 586. **59-61.** See book 3. **61. aevom**: see n. to 1, 549. **62-3.** See 4, 34-41; 749-776; 907-1036. With 63 cf. 1, 133. **64. quod superest**: cf. 1, 50 and n. **65. mortali . . . nativom**: see n. to 1, 754. The list of topics given in 65-77 is not taken up in regular order; and several subjects are treated that are not mentioned here. See the analysis of the book given in the Introd. **69. animantes**: see nn. to 3, 573; 1, 4. **71. loquella**: abl. after *vesci* with the meaning 'to make use of.' For the spelling see n. to 1, 39. **73. insinuarit**: see n. to 1, 113. **77. natura gubernans**: the form of expression is taken from navigation. For the personification of *Natura* cf. 1, 56, 328 and nn. **79. libera sponte sua**: 'of their own free will'; see n. to 523. **81.** Cf. Epicurus in Diog. Laert. 10, 76 'moreover, in the case of the heavenly phenomena, we are not to suppose that the motion and turnings, eclipses, rising, setting, and the like take place through any being having charge of them, regulating them, or about to regulate them, and at the same time having perfect happiness with immortality.' **82-90.** = 6, 58-66. Munro remarks of the whole paragraph, 55-90, that in character and manner it "much resembles 6, 26-89; 1, 54-61; 1, 127-135; 4, 26-52, and some others: these are all introductions to what follows, and have an awkward,

constrained, and unfinished style about them, as if written against the grain in order to complete for the time what was wanting. In our passage of six and thirty lines the first one and twenty form a single long, loose, ill-assorted, ill-constructed sentence; the last nine are word for word repeated elsewhere. All this is another proof that the author left his work in an unfinished state." **82.** Cf. Hor. Sat. 1, 5, 101–3: —

> namque deos didici securum agere aevum;
> nec, si quid miri faciat natura, deos id
> tristes ex alto caeli demittere tecto.

Cf. n. to 3, 18. **83.** *et seq.* Thus a severe thunder-storm for the time being frightened all the Epicureanism out of Horace; see Od. 1, 34. **84.** **quaeque**: see n. to 1, 129. **85.** **supera**: see n. to 1, 429. **87.** **dominos acris** etc.: edd. compare the words of the Epicurean speaker in Cic. N. D. 1, 20, 54 *itaque inposuistis in cervicibus nostris sempiternum dominum, quem dies et noctis timeremus; quis enim non timeat omnia providentem et cogitantem et animadvertentem et omnia ad se pertinere putantem, curiosum et plenum negotii deum?* — **posse**: see n. to 1, 586. **88–90.** Cf. 1, 75–77 and nn.

i. The Destiny of the World.

The world is doomed to destruction. 90–109.

91. **ne te** etc.: cf. 6, 245. **92.** **maria** etc.: the threefold division of the world, so often met with in Lucr. See n. to 1, 6. **96.** Cf. Luc. Phars. 1, 79 *totaque discors Machina divulsi turbabit foedera mundi.* **97.** **animi**: cf. 1, 136 and n. **100.** **ubi . . . adportes**: Cf. n. to 3, 854. **101.** **visu**: the dat. in *u* of the fourth decl. is occasionally found in writers of all periods; Neue, 'Formenlehre,' i. 356–7 has a large collection of examples. Cf. 3, 971 *usu.* **102.** **indu**: see n. to 1, 82. — **via munita**: see n. to 3, 498. Munro notes that the poet here translates from Empedocles, 356:

> οὐκ ἔστιν πελάσασθ' οὐδ' ὀφθαλμοῖσιν ἐφικτόν
> ἡμετέροις ἢ χερσὶ λαβεῖν ἧπερ γε μεγίστη
> πειθοῦς ἀνθρώποισιν ἁμαξιτὸς εἰς φρένα πίπτει.

— **fidei**: *fidēi*, like *rēi*, 2, 112 and 548; see n. to 1, 688. In the earlier writers, and sometimes in the poets (e.g. Hor. and Ov.), *fidē* is some-

times found as gen. **107**. Horace also invokes the goddess of Fortune, who, to both him and our poet, seems to have been merely a personification of the natural order of things, "at the same time chance and inexorable necessity."

Seven reasons are given why the world must inevitably perish:

1. *No divine power presided over its formation, or can stay its destruction.* 110–234.

(1) *The world and its parts are not themselves divine, can contain no animating and conserving soul; for mind cannot exist apart from its particular place in a living, suitable body.* 110–145.

110. Cf. 6, 979–980. The whole passage, 110–234, seems out of place, and is hence bracketed; it does not fit in well with the context, and shows evidence of not having received a final revision by the poet, especially in the repetition of many lines from other parts of the poem. **111–112**. Repeated from 1, 738–9, where see nn. **114**. **religione**: see n. to 1, 932. **116**. **corpore divino**: the poet here is doubtless combating the Stoic doctrine of the world-soul, the doctrine, as expressed by Pope, that

> "All are but parts of one stupendous whole,
> Whose body nature is, and God the soul."

Cf. Cic. N. D. 1, 14, 36 *Zeno . . . rationem quandam per omnem naturam rerum pertinentem vi divina esse adfectam putat*; Id. 2, 17, 45 . . . *ad hanc praesensionem notionemque nostram nihil video quod potius accommodem quam ut primum hunc ipsum mundum; quo nihil excellentius fieri potest, animantem esse et deum iudicem.* Consult Zeller, 'Stoics, Ep. and Scep.' ch. 6, B and C. In controverting the philosophy of the Stoics Lucr. never does them the honor to call them by name. **117**. **par esse**: see n. to 1, 189. — **ritu Gigantum**: a common comparison; cf. Cic. De Sen. 2, 5 *quid est enim aliud Gigantum modo bellare cum dis nisi naturae repugnare?* which goes to sustain the remark of Munro, that the Stoics, "who allegorized everything," doubtless gave the same turn that Lucr. does "to the wars of the giants and Titans with the gods." **118**. **omnis**: goes with *eos*

119. qui etc.: i.e., such as Epicurus and Lucr. himself. — **moenia mundi**: see n. to 1, 73. **121. inmort. mortali**: for the paronomasia cf. 3, 666 and n. — **notantes**: 'branding,' as with the *nota censoria*. **122. quae**: 'though these things.' **123. videri**: an infin. after an adj., a constr. imitated from the Greek, is found also 1145. **124-5.** The sun, sky, earth, and the other parts of the world furnish rather examples of what is devoid of life and sense. **126. est**: = *potest*. **128-141.** Repeated with slight changes from 3, 784-797, where see nn. **144. constant**: i.e., *partes mundi*. **145. vitaliter**: found only here.

(2) *The gods dwell outside the world; its matter is too coarse and dense for their subtle nature. And they did not make the world, — for what motive could have led them, ever blessed in repose, to trouble themselves with creating? or what hurt had it been if we had not been born? or whence could they have drawn the idea of man to make him? Nay, it is merely from concurrence of moving atoms, without directing power, that this world is formed and sustained.* 146-194.

146. **sedes**: these were in the spaces between the worlds. Cf. Cic. De Div. 2, 17, 40 *deos enim ipsos iocandi causa induxit Epicurus perlucidos et perflabilis et habitantis tamquam inter duos lucos sic inter duos mundos propter metum ruinarum; eosque habere putat eadem membra, quae nos, nec usum ullum habere membrorum.* See n. to 3, 18. **149. animi mente**: see n. to 3, 615; *videtur* is of course passive. For the thought cf. the words of the Epicurean in Cic. N. D. 1, 18, 49 . . . *hominis esse specie deos confitendum est. nec tamen ea species corpus est, sed quasi corpus, nec habet sanguinem, sed quasi sanguinem*; also N. D. 1, 25, 71 and 26, 74; 2, 23, 59 *Epicurus monogrammos deos et nihil agentis commentus est*; 1, 37, 105 *sic enim dicebas, speciem dei percipi cogitatione, non sensu.* **150. suffugit**: perhaps the force of the perfect is, 'as far as human experience reaches, this has' etc. **151.** (*ea*) *debet contingere nil quod nobis tactile sit.* For the force of *debet* see n. to 1, 232. **154. tenues** etc.: Lachmann reads *tenuest si corpu' deorum.* — **de**: = *secundum* 'after the model of,' 'in conformity with,' says Munro, and refers to Lorenz, Plaut. Most. 760. **155.** Lucr. nowhere discusses at length the nature of the gods or their habitations. **156. porro**: see n. to 1,

184; with *voluisse* supply *eos* referring to *deum* above. **160. nec fas** etc.: 'and that it is impious to shake from its firm seats that which in old time by the forethought of the gods was based on everlasting foundations' (lit. 'never-ending time') etc. The reference is to the great fabric of superstition. **165–7.** For the thought cf. Cic. N. D. 1, 9, 23 *an haec, ut fere dicitis, hominum causa a deo constituta sunt? sapientiumne? propter paucos igitur tanta est rerum facta molitio. an stultorum? at primum causa non fuit, cur de inprobis bene mereretur.* **168. quietos** etc.: explained by the first of the κύριαι δόξαι (Diog. Laert. 10, 139, *a*) 'whatever is happy and immortal neither has trouble itself nor causes trouble to another'; cf. Cic. N. D. 1, 17, 45 and 19, 51. **171. aegri**: cf. 3, 832 and n. **174. credo**: sarcastic, but at best an awkward reading; Munro proposes *crepera*.—**vita**: i.e., *divom*. With the thought of 171–5 cf. Cic. N. D. 1, 9, 21 *ab utroque* (the Stoic and the Platonist) *autem sciscitor, cur mundi aedificatores repente exstiterint, innumerabilia saecla dormierint*; 1, 9, 22 *isto igitur tam inmenso spatio, quaero, Balbe* (Stoic) *cur πρόνοια vestra cessaverit. laboremque fugiebat?... quid autem erat quod concupisceret deus mundum signis et luminibus tamquam aedilis ornare? si, ut deus ipse melius habitaret, antea videlicet tempore infinito in tenebris tamquam in gurgustio habitaverat.* **176. creatis**: attracted from the acc. to agree with *nobis*. Cf. Hor. Sat. 1, 1, 19 *atqui licet* (*eis*) *esse beatis.* **177.** *Enim quicumque natus est, debet* etc. Cf. 3, 1081 and n. **180. numero**: i.e., *viventium*. **182 notities**: used by Lucr., as Munro explains, to express the πρόληψις of Epicurus, a preconception or notion of the mind laid up, "that is to say, a recollection of what has repeatedly appeared from without." What model or form of man (*exemplum*) could the gods ever see, that they could store up in mind a conception or notion (*notities*) to work from? Ov. Met. 1, 83 says that man was made *in effigiem moderantum cuncta deorum.* **184. principiorum**: see n. to 1, 55. **185. possent**: see n. to 1, 586. **187–191** = 422–6. **188. plagis**: see n. to 1, 528. **192–4.** Cf. 1, 1026–8. **194 haec rer. summa**: see n. to 1, 235.

(3) *Even if I knew not the first-beginnings of things, I should be certain that the gods did not make this world for man, because there is so much in it all awry and bad. By far the larger part of the earth cannot be dwelt on, while brambles, droughts, floods, frosts, and gales strive to make of no avail the farmer's* [illegible]

Whence, too, the wild beasts, foes to men? whence seasons of sickness, and untimely death? Mark, too, the helpless infant, whose first sound is a cry of woe, while the young of brutes are strong and have no need of care. 195–234.

195–199. Cf. 2, 177–181. **196. rationibus**: 'arrangements,' 'operations.' **199. tanta stat** etc.: this doctrine of the faultiness of the present order of things stands in marked contrast with the teaching of the Stoics that the world is perfect; cf. Cic. N. D. 2, 14 37 *scite enim Chrysippus, ut clipei causa involucrum, vaginam autem gladii, sic praeter mundum cetera omnia aliorum causa esse generata, ut eas fruges atque fructus, quos terra gignit, animantium causa, animantis autem hominum, ut equum vehendi causa, arandi bovem, venandi et custodiendi canem; . . . sed mundus, quoniam omnia complexus est neque est quicquam quod non insit in eo, perfectus undique est.* The existence of natural and moral evil has always vexed the minds of the thoughtful; thus the Preacher exclaims (Eccl. i. 14–15), 'I have seen all the works that are done under the sun; and, behold, all is vanity and vexation of spirit. That which is crooked cannot be made straight, and that which is wanting cannot be numbered.' Expressions in the same spirit are common in all literatures. Modern materialists and pessimists make much use of the same arguments that Lucr. here so forcibly states. Cf. e.g Haeckel, 'Nat. Hist. of Creation,' i. 19–20: consult Lange, 'Hist. of Materialism,' iii. 338 *et seq.*; Flint, 'Anti-Theistic Theories,' pp. 290–334; Janet, 'Final Causes,' p. 421 *et seq.*; 'Le Système de la Nature,' Pt. 2, ch. i.; Schopenhauer, 'The Misery of Life.' **200. principio**: corresponds to 204 *porro*, 218 *praeterea*, 222 *porro*. — **quantum**: i.e., *mundi*, the whole expression being equivalent to *orbem terrarum*. — **impetus**: 'expanse,' seems here merely to denote size, as Munro remarks in n. to 4, 416 *inpete*, a signification derived from the primary meaning of force and vehemence; there seems to be no allusion here to the revolution of the heavens, though that is usually involved in the expression *impetus caeli*. 201. inde: 'of it,' a meaning that survives in the French *en*. — avidei: for *avidam* of MSS.; Lachmann has *aliquam*, Bernays *avide*. For the form see n. to 1, 230. **202. tenent**: supply *partem*. **208. bidenti**: a kind of heavy hoe, differing from the common hoe (*rastrum*) in having two prongs. It was used sometimes instead of a plow for breaking up the ground, as well as for crushing clods and



tearing sods to pieces. **209. pressis aratris**: 'by pressing down the plow,' a very important operation in ancient plowing on account of the rude structure of the tool, and hence often referred to in characterizing the toil of the farmer. **210-11.** Cf. 1, 211-2. **211. cimus**: supply *res*. **213. et tamen**: see n. to 1, 1050. **216. imbris**: nom. pl. **220. morbos**: the ancient like the modern Romans had good reason to dread the fevers that come with the changes of spring and autumn. **223. infans**: adj. **226-7.** With the thought cf. Plin. N. H. 7, 2, *hominem tantum nudum et in nuda humo natali die abicit ad vagitus statim et ploratum, nullumque tot animalium aliud ad lacrimas et has protinus vitae principio*; also Job, ch. 3; edd. compare Lactantius 3, where 327 is quoted and the thought enlarged upon; Munro quotes Shakespere, 'Lear' 4, 6:

> "Thou knowest, the first time that we smell the air
> We wawl, and cry; . . .
> When we are born, we cry that we are come
> To this great stage of fools."

Kant remarks ('Anthrop. II. E., Hart. viii. 652) "that no creature except modern man has the habit of entering upon life with a cry. He believes that even in man this betraying and enemy-attracting cry cannot originally have occurred, — that it belongs to domestic life, without our knowing through what co-operating causes such a development has taken place." See Lange, 'Hist. of Materialism,' iii. 96 foot-note 11. **228. pecudes** etc.: see n. to 1, 163. **230. infracta**: i.e., in baby-talk. **233. qui**: old abl. = *quibus*. — **omn. omnia**: see n. to 3, 666. **234. daedala**: see n. to 1, 7, and cf. 4, 551 *verborum daedala lingua*.

2. *Earth, water, air, and fire, of which the sum of things is made up, are subject to change, and mortal; so must the whole be.* 235-305.

235 *et seq.* See n. to 110; *principio* has no logical relation with the preceding, but without the intervening passage would join on well after 109. 235-6. Cf. n. to 1, 6 *caeli*. In this mention of earth, air, and fire he often expresses himself with poetic tautology. For *animae* see n. to 1, 715; for *vapores*, n. to 1, 491. **237. videtur**: see n. to 1, 726. **246. principiale**: found only here; *pr. aliq. tem.* 'some time of beginning.' — **cladem**: i.e., *tempus cladis*. With the thought cf.

Cic. N. D. 1, 8, 20 *quae est enim coagmentatio non dissolubilis? aut quid est, cuius principium aliquod sit, nihil est extremum?* The argument of this paragraph is precisely the same as that of Epicurus, who "says that the worlds are perishable because their parts undergo change" (μεταβαλλόντων τῶν μερῶν); see Diog. Laert. 10, 74.

(1) *Earth is mortal; some of it, parched by the sun and trodden by the feet, is scattered by the wind; some is worn away by streams. It is the mother and at the same time the common tomb of all things.* 247–260.

(2) *Water, too, is perishable; the sea, streams, and springs are always overflowing with new supplies, while the sum is ever the same; for wind and sun take away a part, and a part through the earth finds its way back to the sources of rivers.* 261–272.

(3) *The air, likewise, is hourly changing; for into it goes whatever passes off from things, and unless it gave back matter to things they would all be turned into air.* 273–280.

(4) *And fire also; for the sun is always sending forth new light, and that which flows from it perishes, as when a cloud comes between it and us the light below disappears; so lamps are constantly supplying the place of old light with new; the same must be thought true of the heavenly bodies.* 281–305.

247. **Illud** etc.: see n. to 1, 82. 249. **dubitavi**: 'doubt,' a rare meaning of *dubitare* with acc. and infin. following. 257. **alid**: see n. to 1, 263. 258. **redditur**: 'is replenished.'—**dubio procul**: see n. to 1, 812. 259. **omniparens**: see nn. to 1, 250–1. 263. **opus est**: supply *declarare* from *declarat.*—**decursus**: down-flowing; cf. 946; 1, 283. 264. 'But whatever water is on the surface is taken off, and it happens that on the whole water does not overflow.' 266. The ancients had no clear idea of the process of evaporation. 269. **virus**: see n. to 1, 719. With the thought of 261–72 cf. Eccles. i. 7: "All the rivers run into the sea; yet the sea is not full; unto the place from whence the rivers come, thither they return again." 271. Edd. compare Enn. Ann. (Vahl.) 177 *quod per amoenam urbem leni fluit agmine flumen;* and Verg. Aen. 2, 782 *leni fluit agmine Tibris;* with 272, Hor. Ep. 16, 48 *levis crepante lympha desilit pede.*

274. **privas**: see n. to 3, 723. 275 *et seq.* No passage in the poem reveals more clearly than this the utter ignorance of the poet,

and the ancients in general, as regards the nature of chemical changes. Still, 275-7 taken loosely embody an important fact, that innumerable invisible bodies are present in the atmosphere, constantly passing off from things or coming into relation with them; the error, of course, lies in supposing that these can become air. **276. contra**: see n. to 1, 66; here, of course, in a logical sense. **280. reccidere**: see n. to 1, 228. **284. prim. quicq. etc.**: 'every preceding emission of brightness is quite lost to it, wherever it falls.' **285. hinc**: refers to what follows, as indicated by the punctuation. **287. inter qu. rumpere**: tmesis. **288. inferior**: i.e., beneath the cloud. **289. qua**: goes with *cumque*. **295. lychini**: Munro, for *lyclini;* Lachmann writes *lychni*, the common form of the word; but Munro thinks Lucr. knew only the trisyllabic form, "whether he wrote *lychini* or *luchini* or *lichini;* or even one of the still older forms *lucini* or *licini*." The *pendentes lychini* were lamps suspended by chains from the ceiling. With this line cf. Verg. Aen. 1, 726 *dependent lychni laquearibus aureis;* see Macrobius, Sat. 6, 1, 18. **296. taedae**: slips of pine, used for light in processions, and for going into dark places; sometimes also for torture; cf. 3, 1017. They correspond to the 'pine knots' so much used in the South and in frontier settlements. **299-301.** The place of the perishing light is so quickly and continuously supplied by new light that no change is noticed.

3. *Rocks and the most enduring structures finally yield to time, and decay.* 306-317.

4. *The enveloping heaven, if, as some say, it begets all things from itself and receives them back again, thus ever changing must be mortal.* 318-323.

309-10. Ironical. Cf. 2, 1100-4. **310. naturae foedera**: see n. to 1, 586. **312. sene**: Munro, for *cumque*. Lachmann reads the line *quae fore proporro vetitumque senescere credas*, in which there seems to be unnecessary change; *sene*, i.e. *se-ne*, not from *senex*. Trans. 'Ask for themselves as well whether you 'd believe that they decay with years?' **313. silices**: see n. to 1, 571. **316. quae**: = *si ea*. **318. hoc**: i.e., *caelum*. Cf. n. to 1, 250 *pater aether*. **320. quidam**: Pacuvius and the like. Edd. quote a passage of Pac. (86-92 Ribbeck):—

Hóc vide circúm supraque quód complexu cóntinet
térram
sólisque exortu capessit cándorem, occasú nigret,
íd quod nostri caélum memorant, Grái perhibent aéthera:
quídquid est hoc, ómnia animat, fórmat, alit, augét, creat,
sépelit recipitque ín sese omnia, ómniumque idem ést pater,
índidemque eadém quae oriuntur, de íntegro aeque eodem óccidunt.

which it is thought Lucr. followed. **323. deminui**: i.e., *cum res auget alitque.* With the thought of 322–3, cf. 3, 517–8.

5. *Had the world existed from eternity, the poets would sing of deeds back far beyond the tales of Thebes and Troy. Dost think that, though the world has always been, heat, earthquakes, or floods destroyed the race of men? Then much the more is the world proved mortal; for a more potent cause might have wrecked the world itself.* 324–350.

326. supera: see n. to 1, 429.—**funera Troiae**: see n. to 1, 464. **330. summa**: i.e., *haec summa rerum*, synonymous with *mundi.* See n. to 1, 235. **332–5.** Guyau finds in Lucr. the poet of progress; cf. 'Morale d'Épicure et ses rapports avec les doctrines contemporaines,' p. 159: 'Without doubt already there have been found in Lucretius a large number of modern ideas, as those of evolution and of natural selection; but that of human progress, moral, intellectual, and industrial progress, which he has so clearly expressed, has up to the present hardly been noticed. Still, the fifth book of Lucretius has the most striking analogy with the "Esquisse des progrès de l'esprit humain," drawn in our day by Condorcet.' **336. cum primis**: see n. to 1, 130. **336–7.** Previous to Lucr., however, C. Amafinius had treated in bad prose the physical doctrines of Epicurus; Zeller from Cic. Tusc. Disp. 4, 3, 6 fixes his date "not long after the philosophic embassy of 156 B. C." Cf. Cic. Acad. 1, 2, 5 *vides autem . . . non posse nos Amafinii aut Rabirii similis esse, qui nulla arte adhibita de rebus ante oculos positis volgari sermone disputant; nihil definiunt, nihil partiuntur, nihil apta interrogatione concludunt, nullam denique artem esse nec dicendi nec disserendi putant.* Perhaps it was on account of their style that Lucr. passes over in contempt the services of Amafinius and Rabirius (or Rabinus) in popularizing the Epicurean philosophy; at any rate, their books were much read, as is evident from Cic. Tusc. Disp. 4, 3, 6 *cuius (Amafinii) libris editis commota multitudo contulit se ad eam potissimum disciplinam, sive quod erat cognitu*

perfacilis, sive quod invitabantur inlecebris blandis voluptatis, sive etiam, quia nihil erat prolatum melius, illud, quod erat, tenebant. See Ritter, 'Hist. of Phil.' iv. 82–3; Zeller, 'Stoics, Ep., and Scep.' ch. 15, C; Reid's 'Academica,' Introd. pp. 26–7; cf. nn. to 20, and 1, 25; 1, 928–930. **339. saecla**. see nn. to 1, 20 and 202. — **vapore**: see n. to 1, 491. **340. vexamine**: found only here. **342. cooperuisse**: pronounced as if *cōperuisse;* cf. 6, 491 *cōperiunt*, for *cooperiunt*. So 3, 861 *dērrarunt;* 1, 711 *dērrasse;* see n. to 1, 43. **343. necessest**: see n. to 1, 270. **345** *et seq.* A similar argument is used 3, 592 *et seq.* to show that the soul perishes with the body; cf. especially 346–7 with 3, 602. **345. periclis**: Epicurus held that all the innumerable worlds would be destroyed, some in one way, some in another. Cf. Diog. Laert. 10, 73 'All (the worlds) must be again dissolved, some more rapidly, some more slowly, and some from one cause, some from another.' Cf. Plut. Plac. 2, 4. **350. atque**: see n. to 1, 281.

6. *Whatever is imperishable must either possess a nature unaffected by blows, or must not be exposed to blows, or must have no surrounding void into which it can be dissolved. The world meets none of these conditions, hence is doomed. Hence, too, we know it had a beginning; for, being perishable, it could not have survived from an infinite past.* 351–379.

352. cum: see n. to 1, 347. — **ictus**: see n. to 1, 528. **355. ante**: 1, 483 *et seq.* **358. neque . . . hilum**: see n. to 3, 220. — **fungitur**: see n. to 1, 441. **359. loci**: as in 1, 482, where see n. **360. quo**: = *in quem.* **361. summarum summa**: the universe; *summa rerum* is used with the same signification; cf. n. to 1, 235. With 361–3 cf. 2, 303–7. **362. qui**: = *aliqui;* as Munro remarks, "you would expect *ullus* (or *quisquam*), just as in 359 *nulla loci fit copia.*" **364. uti docui**: 1, 329 *et seq.* — **mundi**: the universe is imperishable, but the world is not. **367. ex infinito**: refers to space; cf. n. to 1, 1001. Epicurus taught that the space between the worlds (μεταξὺ κόσμων διάστημα, or μετακόσμιον) was not absolutely void, but contained more or less stray matter. See Diog. Laert. 10, 89. How his gods managed to pass an undisturbed and ever-blessed existence there, it is hard to imagine. **373. leti ianua**: see n. to 1, 1112.

7. *The world's members, hotly warring, are now held in check by balance of forces; but sometime heat may conquer moisture, or moisture heat. Once, it is said, fire prevailed, and once water; the like may happen again with destruction more far-reaching.* 380–415.

381. **membra**: four members are mentioned 235–6; but the poet here speaks only of the strife between fire and water. In the last paragraph the external causes of destruction were discussed; he now takes up the causes that may lurk within the world itself. — **pio nequaquam**: because of their relationship. 382. **ollis**: see n. to 1, 672. 383. **vel cum** etc.: another *vel* would be expected, as Munro observes, to complete the constr.; but at 386 the poet gives a different turn to the thought, and changes the form of the sentence. Instances of a like change of constr. are not uncommon. With this strife between fire and water Lambinus compares the famous θεῶν μάχη, or contest between Apollo and Neptune, in Homer. Anaximander held that the sea would sometime dry up; this must lead to the burning up of the earth, as the elements of heat and fire would then preponderate. Heraclitus taught that the present order of things would come to an end in a great conflagration; see n. to 1, 638. Certain of the Stoics believed that the world is sometimes destroyed by fire and sometimes by floods, a new world always coming into existence after a fixed period. To the last point Boethius made the apt objection that if the world burned up, the fire after a time must needs go out for lack of fuel, and there would be nothing left to make a new world out of. Xenophanes, too, seems to have taught the periodical visitation of the earth by floods. 387. **diluviare**: not found elsewhere. The thought of 386–7 is explained by 269–272. 388-9. Cf. 266–7. 394. **cum**: concessive. 394 is explained below 396–405; 395, 411–2. 396. **superat**: = *superavit*; see n. on 1, 70 *inritat*. 397. **Phaëthonta**: the poet interprets the myth of Phaëton after the manner of the Stoics, supposing it to have a basis of fact in some vast and destructive conflagration. For a similar explanation of the story see Keightley's 'Mythology.' Lambinus compares Plato's interpretation Tim. 22 C: 'Now this has the form of a myth, but really signifies a declination of the bodies moving around the earth and in the heavens, and a great conflagration of things upon the earth recurring at long intervals of time; when this happens, those who live upon the mountains and in dry and lofty places are more liable to destruction

than those who dwell by rivers and the seashore.' Jowett's trans. **399. at** etc.: Munro notes that *at pater omnipotens* also in Verg. Aen. 6, 592 and Ov. Met 2, 304 "begins the description of Jupiter striking a man with lightning;" in Aen. 7, 770 and Ov. Met. 1, 154 *tum pater omnipotens* is used in a similar manner. **400. magnanimum:** Ovid applies this epithet to Phaethon, Met. 2, 111. His prolix but spirited account of Phaethon (Met. 2, 1-400) in several places shows the influence of the present passage. Ovid was one of the few prominent literary men of his time that admired Lucretius, and were not ashamed or afraid to own it. Cf. Amorum 1, 15, 23-4: —

> Carmina sublimis tunc sunt peritura Lucreti
> Exitio terras cum dabit una dies.

402. aeternam etc.: inconsistent with the very point that is being proved; but, as Munro suggests, Lucr. is here speaking as a poet. **405. veteres** etc.: cf. 2, 600. **409. ratione:** see n. to 1, 110. **411. umor** etc.: the reference is to the flood which Deucalion and Pyrrha alone survived. See Ov. Met. 1, 260-451. **415.** Notice the chiastic arrangement.

ii. The Formation of the World.

1. The evolution of the world. 416-508.

Now, how yon gathering of matter formed earth, sky, sea, the sun and moon, I shall set forth. For not with guiding reason was the world built; but from infinite time atoms of every kind clashing tried all forms of union till earth, sea, sky, and living things resulted. 416-431.

416 *et seq.* The poet has proved that the world must perish, and also that it had a beginning; he now proceeds to show of what sort that beginning was; how, from a cloud of falling atoms clashing in space, the present order of things has come about and continues in existence. **416. materiai:** see n. to 1, 55 *primordia.* By the *coniectus materiai* the poet means the atoms falling in the void before the world was; see 2, 80 *et seq.* **419-422** = 1, 1021-4, where see nn. **423-6.** = 187-191. **428.** Repeated from 1, 1026. **429-431.** Cf. 2, 1061-3. Munro finds in the repetition of lines and

careless structure of this introductory passage, additional evidence that the poem was left in an incomplete state. The position of Lucr. in these lines is exactly that of modern materialistic evolution. Cf. Flint, 'Anti-Theistic Theories,' p. 69: "The development theory has been ingeniously improved at many particular points in recent times, but it has not been widened in range. It was just as comprehensive in the hands of Lucretius as it is in those of Herbert Spencer. Its aim and method are still the same; its problems are the same; its principles of solution are the same; the solutions themselves are often the same"; also an able article by Prof. Morey, 'Herbert Spencer in the Light of History,' in the Baptist Quarterly Review, vol. 5, no. 19 (1883); Tyndall, 'The Belfast Address' (in 'Fragments of Science'); Lange, 'Hist. of Materialism,' ii. 240 *et seq.*; Spencer, 'Prin. of Psychology,' i. 465, n.; Haeckel, 'Nat. Hist. of Creation,' i. 35: "Scientific materialism positively rejects every belief in the miraculous, and every conception, in whatever form it appears, of supernatural processes." Cf. also nn. to 1, 150; 1, 443; 1, 823-6, and Introd.

Before the world was there was discordant concourse of atoms. Then slowly came a gathering into parts; the sky became separate from earth, sea from land, pure aether from the air. 432-448.

432. **solis rota**: cf. 564. For the thought of 432 *et seq.* cf. Ov. Met. 1, 6-20, particularly 6-11:—

> unus erat toto naturae vultus in orbe,
> quem dixere chaos; rudis indigestaque moles,
> nec quicquam nisi pondus iners, congestaque eodem
> non bene iunctarum discordia semina rerum.
> nullus adhuc mundo praebebat lumina Titan,
> nec nova crescendo reparabat cornua Phoebe.

433. **mundi**: = *caeli*. 437. **genus**: cf. n. to 3, 221; so *omne genus* 'of every kind' is often used by Lucr.—**principiis**: see n. to 1, 55. 438-9. See nn. to 1, 633-4 and 685. 442. **motus** etc.: cf. 1, 1030. 443. **loci**: gen. dep. on *inde*; 'after that.' For similar use of *loci* referring to time see Roby, index under *loci*; cf. H. 397, 4.—**pares** etc.: cf. Cic. De Sen. 3, 7 *pares autem vetere proverbio cum paribus facillime congregantur.* That the proverb was an old one

even in the time of Lucr. and Cicero is evident from Hom. Od. 17, 218 ὡς αἰεὶ τὸν ὁμοῖον ἄγει θεὸς ὡς τὸν ὁμοῖον, and Plat. Phaedr. 240 C. For the thought of 443 *et seq.* cf. the account of world-formation by Epicurus in his letter to Pythocles, Diog. Laert. 10, 89–90: 'suitable seeds (σπερμάτων, i.e., 'atoms') flowing from one world, or from several, or from the spaces between worlds, little by little form a collection, an organized whole, which undergoes changes perchance, and receives increase until there has been produced a complete and enduring combination, to which successive additions may be made,' etc. 446. Cf. Ov. Met. 1, 21–3:—

> hanc deus et melior litem natura diremit;
> nam caelo terras et terris abscidit undas
> et liquidum spisso secrevit ab aëre caelum;
> quae postquam evolvit etc.

It is worthy of note that Ovid, in his account of the evolution of the world from chaos, uses the word *evolvere*. Cf. Macr. 6, 4, 24. 447. **sorsum**: see n. to 3, 631. 448. **aetheris**: by *aether* Lucr. sometimes means the sky (see 1, 250 and n.), sometimes the enveloping fire-belt (cf. n. to 1, 73); this last he identifies with the pure upper air, which, in the popular beliefs as well as in several of the philosophic systems, was recognized as a fourth part of the world or universe and a fourth element. Generally, however, Lucr. holds to the three-fold division of the world, which he mentions and emphasizes again and again. See n. to 1, 6–8.

Then the particles of earth collecting settled in the lowest place; from the heavier mass thus formed the lighter elements were forced out; these gathering each with its kind formed sea, air, aether, and the heavenly bodies. 449–508.

451. **imas**: cf. 1, 1052 *et seq.*, and nn. 452. **perplexa**: the atoms got 'entangled' because of their irregular shapes, for which see 2, 333 *et seq.*; explained by Cic. N. D. 1, 20, 54 . . . *atomorum quae interiecto inani cohaerescunt tamen inter se et aliae alias adprehendentes continuantur; ex quo efficiuntur eae rerum formae et figurae, quas vos effici sine follibus et incudibus non putatis.* 453. **expressere** etc.: this account of the differentiation of chaos into the distinct parts of the world in certain respects much resembles that by Empedocles and

that by Anaxagoras, for which consult Zeller, 'Prae-Soc. Phil.' ii. 154–8 and 354–7. It bears striking analogy also to the modern nebular hypothesis. **455. rutundis**: see n. to 3, 186. **456. elementis**: used by poetic tautology as synonym of *seminibus*, which is itself used for *primordiis*, just as Epicurus has *σπέρματα* in the passage quoted in n. to 442. **458. erumpens** etc.: Ovid imitates this, Met. 1, 26–7: —

> ignea convexi vis et sine pondere caeli
> emicuit, summaque locum sibi legit in arce.

Munro compares Milton, 'Par. Lost,' 3, 716 *et seq.* **460. ac**: see n. to 1, 281. **461. gemmantis** etc.: cf. Milton, 'Par. Lost,' 5, 746–7: —

> stars of morning, dew-drops, which the sun
> Impearls on every leaf and every flower.

465. quae: i.e., *corpora umoris.* **467. diffusilis**: 'expansive'; found only here. **468. circ. . . . flexit**: 'swept around and arched itself on all sides.' **471. exordia**: 'beginnings,' 'rudiments.' **472. interutrasque**: adv., meaning 'between both,' referring here to earth and aether. Lachmann reads *interutraque*; but Munro (nn. to 2, 518) well defends *interutrasque.* **474. fuerunt**: see n. to 1, 406. **475. labier**: see n. to 1, 207. **476. et tamen**: see n. to 1, 1050. — **viva**: here, as in 402 *aeternam lampada mundi* and in 514 *aeterni sidera mundi*, Munro remarks, Lucr. is using poetic, not philosophic, language. **479. ea**: i.e., *alia* (*membra*). **482. fossas**: 'hollows.' Cf. Ov. Met. 1, 29–31: —

> densior his tellus elementaque grandia traxit,
> et pressa est gravitate sui; circumfluus umor
> ultima possedit solidumque coercuit orbem.

485. verberibus: see n. to 1, 528. — **in artum**: 'into close mass'; for *partem*; Lachmann has *a limini' parte*. *extrema ad limina* refers to "the whole outer surface" beaten by the rays. **489. elabsa**: see n. to 1, 79. **491. densebant**: see n. to 1, 395. For *templa* see n. to 1, 120. **493–4.** So geologists affirm that the unequal density and hardness of the earth's crust, as it gradually contracts, account in great measure for the unevenness of its surface. **495. terrae pondus**: Ov. Met. 1, 52–3 has *pondere terrae* and *pondus aquae.*

501. **aërias auras**: see n. to 1, 771. 503. **haec**: i.e., below. 505. **impete**: for *impetu*: so several times in Lucr. With our poet's description of the aether cf. that of the Stoic in Cic. N. D. 2, 40, 101 *ultimus et a domiciliis nostris altissimis omnia cingens et coërcens caeli complexus, qui idem aether vocatur, extrema ora et determinatio mundi, in quo cum admirabilitate maxima igneae formae cursus ordinatos definiunt.* The Stoics believed that the heavenly bodies are in the aether, the Epicureans that they are mostly between the aether and the earth, in the air. 507. **Pontos**: i.e., Pontus Euxinus. The Black Sea, with its current moving steadily on, indicates how it is possible for the aether to preserve a continuous and uniform movement.

2. The explanation of astronomical phenomena. 509–770.

The poet takes up in order the motions of the stars, the relation of the earth to the world, the size of the heavenly bodies, the nature of the sun, the alternation and variation in length of day and night, the source of the moon's light, and the cause of eclipses.

(1) *The motions of the stars are caused by currents of air, or by tides of aether, or perchance by search for food.* 509–533.

509–533. Having shown in a general way how from a concourse of atoms the world was formed, the poet proceeds to explain those phenomena of the heavens which are most mysterious and impressive, and are thought to point to the guiding and staying power of a deity. This first part about the stars, however, is evidently not in close connection with what precedes and follows; for this reason it is bracketed by both Lachmann and Munro. It furnishes additional evidence of the incomplete state in which the poem was left by its author. 511 *et seq.* 'We must say that an air presses on the pole at each extremity, and on the outside holds it in and closes it in at both ends; then that a third air streams above and flows in the same direction in which the stars of the eternal world go, shining as they roll; or else that the third air streams below, in order to carry up the sphere in the contrary direction,' etc. 511. **polum**: here seems to mean the axis of the heavens, about which they revolve. Against the ends of this two air-currents, steadily blowing, keep the heavens

in piace; then a third air-current causes the revolution of the heavens by blowing either over the sphere or under; in the last case the motion is produced just as the current of a stream turns a water-wheel. — **aëra**: the air-current holds a most important place in the explanation of phenomena both celestial and terrestrial by the ancients. It was employed by Anaximander to explain the movement of the heavenly bodies; by Anaximenes, to account for the circular form of their orbits; by Empedocles, to show the reason for the inclination of the earth's axis toward the path of the sun; by Archelaus (follower of Anaxagoras) and others to account for the steady position of the earth in the world; by Democritus, Metrodorus, and the Epicureans, to explain the cause of earthquakes (cf. 6, 535–607). Cf. also the Stoic doctrine that "all attributes by means of which one object is distinguished from another are produced by the existence of certain air-currents, which emanate from the centre of an object, diffuse themselves to its outer limits, and having reached the surface, return again to the centre to constitute the inward unity;" by some, moreover, air-currents were given no small significance in the explanation of the soul. In many cases it seems as if the ancient philosophers, when they had come across a great mystery and wished to heed the dictum expressed in Horace's *nec deus intersit*, took refuge in an air-current, instead of a god, as unseen cause. **514. aeterni**: see n. to 476. **515. supter**: see n. to 1, 79. **516. haustra**: explained by Munro after Nonius p. 13 and Vitruv. 10, 5 (10) as "scoops or basins attached to the wheel to lift up the running water;" trans. 'water-scoops.' **521. Summania**: found only here; the MSS. give this form, which is generally taken as a wrong reading or an equivalent of *immania*. It is better explained, however, as derived from *Summanus*, the name of an ancient divinity who was thought to preside over the nocturnal sky and to wield the lightnings that appear in the night; there was a temple for his worship near the Circus Maximus, and in the pediment of the temple of the Capitoline Jupiter there was a representation of him. *Summania templa*, then, as Munro interprets, refers to the nightly sky; trans. 'heaven's Summanian quarters.' **523. sive** etc.: again Lucr. is using poetic language, which strictly interpreted would be inconsistent with his system. The thought is, that the heavenly bodies, gathering to themselves matter to repair waste, naturally move whithersoever the atoms adapted to them are found in greatest abundance; for to different

things different shapes of atoms are suited (see 1, 190-1 and n.). In speaking of the stars as living things, however, the poet was conforming to the language of many of his philosophic predecessors and contemporaries as well as to that of common life; for their divine nature was deeply rooted in ancient thought. Anaximander and Anaximenes seem to have considered the stars as created gods; the Pythagoreans believed in their divinity; Plato and Aristotle taught that they are living, rational beings; and the Stoics thought that they are permeated with the divine spirit, possessed of souls. **526. eorum**: i.e., *earum causarum*. **527. possit**: supply *fieri*. — **omne** = τὸ πᾶν; see n. to 1, 74. **528. mundis**: infinite in number. See n. to 1, 73, *ad fin.*: Cic. N. D. 1, 24, 67 *sed ubi est veritas? in mundis, credo, innumerabilibus, omnibus minimis temporum punctis aliis nascentibus, aliis cadentibus.* **531. in hoc**: i.e. *in hoc mundo*. — **causa** etc.: the position of Lucr. here is exactly that of Epicurus, who in explaining natural phenomena made it his principle to assign several causes, any one of which might be true of this world, and all of which might operate in one or another of the infinite number of worlds. Thus he declares that the motion of the stars may be due to the movement of the entire heaven; or that they may move while the heaven remains stationary, either from an impulse given them when they were formed and continued by their heat, or from the attraction of material suitable to their nature, etc.; see Diog. Laert. 10, 25, 87 *et seq.*; 10, 25, 111-4. Consult Lange, 'Hist. of Materialism,' i. 150 *et seq.*; particularly n. 74: "It is interesting that recently a Frenchman (A. Blanqui, 'L'Éternité par les Astres, Hypothèse astronomique,' Paris, 1872) has carried out again, quite seriously, the idea that everything possible is somewhere and at some time realized in the universe; and, in fact, has often been realized, and that too as an inevitable consequence, on the one hand, of the absolute infinity of the universe, but on the other of the finite and everywhere constant number of the elements whose possible combinations must also be finite." Cf. Lucr. 2, 480-521.

(2) *The earth rests in poise, in the middle of the world; its weight gradually lessens below, and underneath is a nature closely connected with it and with the air about it. With this it has existed, forming with it a whole, from the beginning of the world; neither is burdened by the other, any more than a man is burdened by his own limbs.* 534-563.

534. med. mundi reg.: cf. 1, 1052 *et seq.* and nn. The universe has no centre, but the world has. Lucr. nowhere gives a hint as to his idea of the earth's shape. From his rejection of the belief in the antipodes, however, and from what is said here of a nature beneath supporting it, we may suppose that he conceived of it as flat. Epicurus (Diog. Laert. 10, 74) says that 'we are not to suppose that the worlds of necessity have one and the same shape.' According to Diog. Laert. he taught that some are spherical, some elliptical, and others of other shapes. Regarding the shape of the earth, however, no definite statement of his has come down to us; he merely says that it rests suspended on the air (τὴν γῆν τῷ ἀέρι ἐποχεῖσθαι). This is suggestive of the view of Anaximenes, that the earth is broad and flat, and is supported by the air. Leucippus and Democritus supposed it to be "an exceedingly flat cylinder, which supports itself on the air by means of its breadth." **537. uniter**: seen. to 3, 839. **538. vivit**: truly a strange word for a thorough-going materialist to apply to the earth. Ancient thought was permeated with hylozoistic and pantheistic ideas; cf. n. to 514 *aeterni*. **544. per multo**: should be *permulto*. **545. quid etc.**: 'what function each thing has to perform.' **560. potis**: see n. to 1, 452. For the thought cf. 3, 161 *et seq.*

(3) *The sun, the moon, and the stars are of about the same size that they seem to us to be.* 564–591.

564–5. Cf. the statement of Epicurus, Diog. Laert. 16, 91 'In regard to the size of both the sun and the other heavenly bodies, it is indeed, as far as pertains to us, such as it appears to be.' This doctrine seems to have been peculiar to Epicurus and his followers. Leucippus and Democritus held that the sun is much larger than the earth, and that the shadows of mountains can be traced on the moon's surface. Cf. Cic. De Fin. 1, 6, 20; Acad. 2, 26, 82; Plut. Plac. 2, 21, 4; Sen. N. Q. 1, 3, 10. **564. solis rota**: cf. 432. **566. quibus . . . cumque**: tmesis. **568. illa**: *spatia*. **571. loca**: i.e., *corporum nostrorum*. **572. filum**: 'size.' **575. notho**: 'not genuine,' i.e., 'not her own,' 'borrowed.' Whether the moon shines with her own or with borrowed light cannot be known, and makes no difference; the size is not greater than it appears to be. Cf. 705 *et seq.* and nn. **578. quam**: supply *figura*. **579. prius**: with 581 *quam*.

The statement is not true. **583. ut . . . cumque:** tmesis; 'it must be seen by us on high from the earth (*hinc*) precisely such as it is in the outline which defines it, and of the size it actually is.' **584. quanta quanta.:** = *quantacumque*, an ante-classical usage. **585. hinc:** 'from the earth,' as *hinc* in 584; the line should be taken in close connection with 590-1; 586-9, introducing a comparison, are parenthetical. **589. alteram** etc.: provided the flickering of a fire is seen clearly and its heat perceived, the size seems to vary very little, — in appearing either larger or smaller, — whether one be near at hand or far off, in proportion to the distance. The comparison is copied from Epicurus; see Diog. Laert. 10, 91 'But taken by itself, the sun may be a little larger or a little smaller than it appears, or of the same size that it seems to be; for just so it is with fires among us, which are seen at a distance and perceived (directly) by the senses.'

(4) *The emission of so much light and heat from the sun, itself so small, may be caused by the concurrence of fiery particles, or by the burning of the air around it, or by the existence near it of a vast unseen fire* (592-613). *The sun goes over in a year the same space of the heavens between the signs that the moon traverses in a month, because the speed of the heavenly bodies is less the nearer they are to the earth; the moon is nearer than the sun, the sun than the stars, which therefore in their swift onward course first pass the moon, and then the sun; hence the moon seems to go faster than the sun. Or perchance currents of air may keep driving the sun and moon from summer to winter solstice and back again.* 614-649.

595. vapore: see n. to 1, 491. **596. hinc:** i.e., *ex sole.* **597. scatere:** see n. to 40. — **erumpere:** generally intransitive in writers of the classical period. Cf. 4, 1115 *se erupit.* **605. percipiat:** trans. literally; for the force of *per* see n. to 1, 3 *per te.* **607. ardoribus:** strokes or blows of heat; *ictus* is a participle. **608. genus:** see n. to 3, 221. **611.** "Tyndall," says Munro, "quotes what he calls 'this remarkable passage' before his essay on radiation, Frag. of Science,' p. 170; and in the course of the essay shows that the sun's invisible rays far transcend the visible in heating power; and that about 98 per cent. of the whole radiation from our fires consists of invisible rays." **614. ratio:** 'explanation.' **615. aegocerotis:** = *αἰγοκέρωτος*, gen. of *αἰγόκερως*, the Greek for *Capri-*

cornus. **618. lunaque**: the *que* is slightly adversative, 'and yet.' — **mensibus**: i.e., every month. — **spatium**: i.e., between the tropic of Capricorn and the tropic of Cancer. *videatur* is passive. **619. cursu**: pleonastic, yet adding to the clearness of the statement. **621. vel**: intensive. **622.** Cf. 3, 371 and n. **624. caeli turbine**: assumed in the first explanation of the movements of the stars, 510 above. **625. evanescere**: *dicit Democritus.* Cf. 535. — **illius**: *caeli turbinis.* **628. fervida signa**: wrongly explained by Zeller, 'Prae-Soc. Phil.' ii. 250, n. 3 as "the signs of the Zodiac in which the sun is in summer." They are rather, as Munro observes, those signs of the Zodiac which are higher, and hence are carried on in more rapid revolution. **629-31.** The nearer the moon's course is to the earth the less able it is to keep up with the swifter-moving signs above it. **635-6.** The signs in their swifter revolution come up to the moon and pass by it (*praeterque feruntur*). Now they complete their circuit and overtake it again, and so on; the moon in consequence appears to be travelling faster than they in an opposite direction; it seems to be hastening to meet the signs, when in reality they are going much faster in the same direction, and continually overtaking it. **637. aër**: the poet has in mind two air-currents, as indicated by *alter* in 638: the one blows the sun from the summer signs to those of winter; the other blows it from the winter signs to those of summer. Cf. n. to 511 *aëra.* **638. alternis**: see nn. to 1, 524 and 767. **642. fervida signa**: here, as the connection shows, the signs of the Zodiac that the sun visits in the summer. **644. magnos annos**: i.e., the vast periods of the stellar revolutions; see n. to 1, 1029. But cf. Diod. Sic. 2, 46 *λέγεται δὲ καὶ τὸν θεὸν δι' ἐτῶν ἐννεακαίδεκα καταντᾷν εἰς τὴν νῆσον. ἐν οἷς καὶ αἱ τῶν ἄστρων ἀποκαταστάσεις ἐπὶ τέλος ἄγονται. καὶ διὰ τοῦτο τὸν ἐννεακαιδεκαετῆ χρόνον ὑπὸ τῶν Ἑλλήνων μέγαν ἐνιαυτὸν ὀνομάζεσθαι.* The line is imitated from Cicero's Aratea; see n. to 1, 162. In his n. to 619 *annua* Munro gives a number of passages that show the influence of the Aratea. **646. diversis** etc.: 'with winds blowing from opposite quarters the clouds go in opposite directions, the lower in a way contrary to the upper.' **648. qui**: see n. to 1, 168. Epicurus assigns four possible causes for the motions of the sun and moon, Diog. Laert. 10, 93 'The movements of the sun and moon between the tropics may be due either to the obliquity impressed by fate on the heaven at certain epochs, or to the

resistance of the air, or to the fact that being on fire they have need of suitable matter, and that this gives out, or lastly to the fact that in the beginning they received an impulse that compels them to move describing a kind of spiral figure.' As regards the causes of the movements of the sun and moon, the ancients were not at all agreed.

(5) *Night comes either because the fires of the sun are burned out or because it turns its course under the earth* (650–5). *Day follows, when the sun returns from under the earth to its course above, or because new fires at a fixed time have gathered; for many things happen at regular intervals* (656–679). *Days and nights vary in length either for the reason that the sun runs above and below the earth in unequal courses, or that the air in some quarters is more dense, hindering its progress, or that at certain seasons the seeds of fire collect more slowly* (680–704).

653. **itere**: old abl. of *iter*, which had also a nom. *itiner*. Neue ('Formenlehre') gives but two other instances of the use of *itere*. The theory in 651–3 was held by Xenophanes and Heraclitus. On the other hand, the Pythagoreans taught that the sun is an opaque body of a glassy nature, reflecting light and heat from the central fire; night comes when the earth is on the opposite side of the central fire from the sun, and presents to it the side opposite to us. Similar was the view of Empedocles, that the sun concentrates heat from the bright hemisphere which is over us by day. The other earlier physicists for the most part made out that the sun is a fiery body or mass of flames confined, and that night is caused by the dip of the sun in its circular orbit under the earth. Anaximenes, however, said that night results from the going of the sun behind the northern mountains. With the alternatives proposed by Lucr. cf. Epicurus, Diog. Laert. 10, 92 'The risings and settings of the sun, the moon, and the other heavenly bodies, may take place on account of their being kindled, and dying out; and in other ways they may be produced, as in the cases previously mentioned, for the appearances manifest to the senses in no way contradict this. They may happen, too, from the passing of the heavenly bodies above and below the earth; for this also is in no wise inconsistent with appearances.' 655. **orbem**: the sun's disk. 656 **Matuta**: i. e, *Mater Matuta*, the Roman goddess of the dawn. She is not infrequently identified with the Greek Aurora; but it is likely that the name is only a title of Juno. The

Romans themselves sometimes identified Matuta with Leucothea, the daughter of Cadmus. **664. dispersos** etc.: edd. refer to Diod. Siculus, 17, 36, where this phenomenon is described at length; cf. also Id. 3, 47. It was doubtless due to refraction. In some regions the sun often appears of irregular shape. **669. certo** etc.: the poet here, as often, appeals to the observed fact of the uniformity of nature and the regularity of natural processes. Cf. 1, 174 *et seq.* and n. to 1, 586. **671. arbusta**: see n. to 1, 187. **677. fuerunt**: see n. to 1, 406. **679. consequë**: see nn. to 1, 215 and 560. *Consequëe quoque iam redeunt* is Lachmann's emend. for *consequiae quoque iam rerum.* **681. luces**: for *dies*, as often. **682. aut**: the correlatives are below, 696 and 701. — **idem**: 'the same' sun as opposed to the notion in 701–3 of a fresh sun every morning. **684. orbem**: 'orbit.' **685** *et seq.* In running courses of unequal length above and below the earth, the sun adds just as much to the one part as is taken from the other; the longer that part of his course above the earth is, just so much the shorter that part below the earth will be, and *vice versa.* The inequality will continue till the sun reaches the equinoxes (*anni nodus*), at which the day and the night are equal in length. **689. cursu**: for *cursu solis.* — **flatus**: gen. after *medio* 'midway between.' **690. metas**: usually explained as the two tropics. Munro, with good reason, makes it refer to the points where the sun rises and sets; "the heaven keeps his two goals at an equal distance from north and south, i.e., speaking roughly the sun rises and sets due east and west;" and this is so 'on account of the position of the whole starry circle.' **695. notarunt**: 'mapped out.' **701. sic**: i.e., *aëre crassiore.* **703. certa parte**: "a particular quarter, which varies every day throughout the year," Munro explains. After 704 a verse has fallen out, Munro thinks, something like *qui faciunt solis nova semper lumina gigni;* otherwise 704 is well-nigh meaningless where it stands; Lachmann attaches it to 703, and makes no change, but with extreme violence to the sense.

(6) *The moon may borrow its light from the sun, or shine with its own light, or be made anew every day.* 705–750.

707. speciem: 'sight'; so 724; 4, 236 and 242. **708. donique**: old form of *donec*, found also 723, 997; 2, 1116; *donicum* also is sometimes met with in the older writers. See Neue, 'Formenlehre,' ii. 805;

cf. n. to 1, 29. **709. super**: adv.; see n. to 1, 66 *contra*. **712. ex** etc.: 'from a different quarter through the circle of the signs.' **714. cursus**: depends on *viam*; pleonastic. **716. volvier**: see n. to 1, 207. **717. corpus** etc.: on the supposition that the moon shines with its own light, the complete or partial withdrawal of its brightness at times may be accounted for in two ways: either a dark body in a regular course through the heavens partly or entirely hides it from us (717–9); or it may be bright only on one side, and, being spherical, in the course of its revolutions may present to us first the light and then the dark side, with varying phases (720–730). **720. potest**: i.e., *luna*. — **globus pilai**: 'spherical ball.' — **si forte**: = *fortasse*, εἰ τύχοι, Munro remarks, and serves as a connecting particle in passing to a new hypothesis, being about the same as *est etiam ut versari possit, ut globus* etc. **723. quaecumque**: see n. to 1, 1043; *eam partem*, of course, refers to the bright side of the moon. **726. glomer. atque pilai**: = *globus pilai* above. **727. Chaldaeum**: see n. to 1, 1 *divom*; it depends, of course, on *doctrina*. Berosus of Babylon (lived in the first half of the third century B.C.) and his followers taught that the moon is a sphere, half bright and half dark. **728. astrologorum**: not 'astrologers,' but 'astronomers,' though both significations are met with in classical writers. The reference is to those who held that the moon's light is derived from the sun, as most of the Greeks who did not personify the sun and moon taught. This view is said to have been first set forth by Anaximenes (see Zeller, 'Prae-Soc. Phil.' i. 275 for ref. to original authorities); the Pythagoreans, however, believed that the moon, like the sun, is a glassy sphere, which reflects light and heat back to the earth from the central fire; Anaxagoras and Democritus agreed that both sun and moon are bodies of earthy nature, heated by the motion of the sky; and Xenophanes said that the moon burns out and is kindled afresh. This last view has been attributed to Heraclitus also, but on insufficient authority. — **contra**: as in 1, 66 where see n.; here for *contra hos*. **729. uterque**: *Chaldaeus et astrologus*. **730. hoc**: obj. of *amplectier*; 'this view.'

731 *et seq.* Cf. the same argument regarding the sun, 660–679. To this last view the poet himself most inclines; it is, in fact, the most consistent with his system. With the alternatives proposed here by Lucr. cf. Epicurus, Diog. Laert. 10, 94–5: 'The waxings and waning of the moon may be caused by its revolutions, or by the different

shapes it may assume, like air, or by interpositions of another body, or in any of the ways in which we speak of similar phenomena happening before our eyes; with this condition, however, that one do not devote himself to any one opinion, rejecting the others inconsiderately, and, being ignorant of what it is possible, what impossible, to explain, on this account become desirous of explaining things that cannot be known. Perhaps the moon shines by her own light, perhaps she gets it from the sun; for among us one sees many things having light of their own, and many shining by reflection. . . . The appearance of a face in the moon may be due to a transposition of parts, or to the interposition of some body; or to any other causes of such character that they are able to account for appearances of this kind.' **733. privos**: see n. to 3, 723. **734. parte**: 'room,' a signification of *pars* found nowhere else, according to Munro. **737. Venus**: see n. to 1, 2. Edd. notice the suggestion in the following lines of a procession, or, as Munro styles it, "a pantomimic representation" of the four seasons. — **praenuntius**: to whom does this refer? The connection suggests Zephyrus; because the west wind is a marked feature of the south Italian spring, and the winds were represented as winged (*pennatus*). N. P. Howard, followed by Munro, quotes 4, 1057 *namque voluptatem praesagit muta cupido*, and thinks the reference is to Cupid, — a well-chosen interpretation; Flora follows "on the steps of Zephyr, in advance of Spring, Venus, and Cupid, and strews their path with flowers." **739. viai cuncta**: see n. to 1, 86. **741. inde loci.**: see n. to 443. **742. etesia flabra**: cf. 6, 716. During June, July, and August in Central and Southern Italy winds blow from the north and northeast with great regularity; they were hence called *etesiae* (ἐτησίαι) because of their annual recurrence. Cf. Cic. N. D. 2, 53, 131 *quam salutaris non modo hominum sed etiam pecudum generi, eis denique omnibus quae oriuntur e terra, ventos Etesias! quorum flatu nimii temperantur calores; ab isdem etiam maritimi cursus celeres et certi diriguntur.* **745. Volturnus**: supply *ventus.* **746. bruma**: the severest part of winter comes after the shortest day; hence *hiemps sequitur hanc* etc. **749. rusus**: see n. to 3, 1001.

(7) *The eclipses of the sun may be caused by the moon or by some dark body passing between it and the earth, or by the dying out of its fires; those of the moon, by the earth cutting off the light received from the sun,*

or by some opaque body passing between it and the earth or between it and the sun, or by the languishing of its own brightness. 751–770.

753. **cur luna** etc.: the commonest, and as it happens the correct view, is mentioned first. The Egyptians and the Chinese calculated eclipses centuries before the Greeks began to speculate. 754. **a terris**: 'on the side toward the earth.' See n. to 1, 693. — **ei**: i.e., *soli* or *lumini solis*. 756. **aliut**: see n. to 1, 469. For the theory cf. 717–9. — **facere id**: see n. to 1, 667. 757–761. correspond to 660 *et seq.* 763. **super**: 'besides.' 764. **coni**: the expression must refer to the cone-line shadow cast by the earth, through which the moon passes; ***menstrua*** agrees with the subject of *perlabitur*, referring to *luna*. But where does Lucr. get his cone-like shadow? He conceives of the earth as flat; in this passage, then, he must stand convicted of a bold inconsistency, having adopted an astronomical notion that does not harmonize with his system. 765–7. Correspond to 717–9. If this dark body comes below the moon it shuts the moon's light off from the earth; if it passes above the sun's orb, it cuts the sun's light off from the moon, making it invisible. 768. **et tamen**: see n. to 1, 1050. 768–770 correspond to 731 *et seq.* With the whole passage cf. Epicurus, Diog. Laert. 10, 96 'Eclipses of the sun and moon may be caused by their being extinguished, just as we see happening in regard to things on earth, or from the interposition of other bodies, the earth or the sky or something of the kind. Thus we must set side by side the different ways in which phenomena may take place, and bear in mind that it is not impossible for several causes to concur. Now in the twelfth book on Nature Epicurus says these things, and says further that the sun suffers eclipse when it passes into the shadow of the moon; the moon, when the shadow of the earth falls upon it, both sun and moon quickly withdrawing from the shade.' The error of Lucr. then (n. to 764) was that of his master also. From the same passage we learn that it was shared by Diogenes the Epicurean. 770. **per**: with *loca*.

iii. The Origin of Life on the Earth. 771–924.

Since I have revealed the causes of all that goes on in the blue depths of heaven, now I must tell of the new earth, what life it first brought into being. 771–782.

771 *et seq.* The poet, having described the evolution of the world and explained the phenomena of the heavens, now comes to the origin of life. In this passage, which is introductory to the rest of the book, he makes no mention of the development of man in civilization and the origin of superstition, topics that take up the remainder of the book after 924. 772. **quicquid**: see n to 3, 787. 777. **neque opinantis**: = *nec opinantis;* see n. to 3, 959. 778. **conivent**: used of an eclipse only here. 781. **arva**: properly so called, because the earth's surface had not become hardened by time, and had not been covered with vegetation. — **in lum. oras**: this phrase twice occurs in the fragments of Ennius (118 and 165, Vahlen), from whom perhaps Lucr. took it. See n. to 1, 22. 782. **crerint**: in the sense of *decreverint*, 'concluded,' 'resolved.'

First the earth put forth herbs and trees; then birds and animals were produced; and last of all, from cavities near its surface infants crept, to whom with balmy air the new earth gave milk and warmth and downy beds of grass (783–820). *Rightly, then, is earth named mother, since from herself she brought forth all life. But now, wearied with age, she has ceased to bear; for the earth, like all things else, is changing, and grows old* (821–836).

788–9. **pluma** etc.: *pluma* of course corresponds to *pennipotentum*, *pili* and *saetae* to *quadripedum;* for the arrangement cf. Lowell, 'Sir Launfel':—

> Whether we look, or whether we listen,
> We hear life murmur, or see it glisten.

791. **inde loci**: see n. to 443. — **mort. saecla**: same as *animalia* below. 792. **multa modis multis**: see n. to 1, 341. 793. **neque** etc.: so Epicurus expressly states, Diog. Laert. 10, 74: 'We are not to suppose that animals are derived from the infinite; for no one can explain how the germs from which animals and plants and the other things that we see are produced, could be brought from outside into a world like this, nor why such a world as this would not be able to create them in and of itself. Thus also in it they would be nourished; in this light, especially, we are to think of the earth.' All this is to refute the common notion that life is kindled from the sky (cf. n. to 1, 250), and the philosophic doctrine professed

by the Pythagoreans, Stoics, and many others, that the life of animals is a part of the great universal life, — a fragment, as it were, of the world-soul. The Epicureans were especially hostiie to the belief that man has any spark of the divine in him, —

> sive hunc divino semine fecit
> ille opifex rerum, mundi melioris origo,
> sive recens tellus seductaque nuper ab alto
> aethere, cognati retinebat semina caeli. (Ov. Met. 1, 78-81.)

Cf. 2, 1154-5. **794. nec ter.** etc.: in opposition to the view of Anaximander, that the first life was generated by the heat of the sun in the primal slime as the earth was becoming dry; and that "the land animals, including man, had at first been fishes, and afterwards, when they were able to develop themselves under their new shape, they had come on shore and thrown off their scales." See Zeller, 'Prae-Soc. Phil.' i. 255-6. The fanciful theory of the idealist, Oken, is strikingly similar; see his 'Physio-Philosophy,' trans. by Tulk, § 900 *et seq.*: "Every organic has issued out of mucus; the primary mucus, out of which every organic has been created, is the sea-mucus. The sea-mucus was originally generated through the influence of light. . . . Light shines upon the earth-element and it is salted. Light shines upon the salted sea and it lives." Diod. Sic. (3, 2) says that the first men formed were the Ethiopians, because as the moist earth dried off 'it was natural that the spot nearest the sun should be the first to produce animate natures' (φύσεις ἐμψύχους). **795. maternum nomen**: see nn. to 1, 250-1. Into the popular notion the poet projects a deep philosophic significance. **797-8.** Cf. 2, 871-3 and n. to 3, 713. **801. alituum**: = *alitum*; lengthened to suit the dactylic measure; so 1039, 1078; 2, 928; 6, 1216. **802. ova**: how the eggs were produced the poet does not explain.

804. lincunt: see n. to 3, 553. — **sponte sua** etc.: throughout the passage the implication is that the living things spontaneously produced by the earth came forth fully formed and adapted to the conditions of existence. This is in opposition to the teaching of Empedocles, that the different parts of animals and men grew up separately out of the earth, being at length united into beings through Love. Cf. n. to 1, 716. Lucr. agrees with Empedocles, however, in supposing that plants came into existence before animals. Diogenes of Apollonia, Parmenides and Democritus believed that animal life was first pro-

duced by the action of the sun's heat upon the moist earth, the "primal slime," as Zeller calls it. St. Augustine accounted for the apparent spontaneous generation of minute living things by declaring that at the beginning of the world, when God created man and the other animals, he made also an infinite number of invisible seeds, which are present in all the elements and develop into life under the right conditions of heat and moisture. **805. tibi**: see n. to 1, 673. — **mortalia saecla**: here limited to men, as the context shows. **808. apti**: from *apisci;* see n. to 1, 448. **809. aestus**: 'warmth.' **810. infantum**: for the form see n. to 1, 4. **816. pueris**: as in 1, 255 where see n. **818–820.** The youth-time of the world with its eternal spring, its rivers of milk and honey, its crops springing without toil, and the fresh joyousness of new life, was a favorite theme of the ancient poets. Cf. 933; 2, 1156 *et seq.;* Tib. 1, 3, 35–48; Verg. Georg. 2, 336–345; Hor. Ep. 1, 2, 2; Ov. Met. 1, 88–112. **823. fudit**: see n. to 1, 351. **825. aërias vol.**: see n. to 1, 12. **826–7.** The modern advocates of materialistic evolution have found it difficult to explain why at the beginning the lowest forms of life were spontaneously produced from the earth and to-day similar forms are not still produced (for there is not a particle of evidence to show that spontaneous generation is going on at present); and why those lowest forms have not all worked up to a higher plane of existence, instead of showing no essential change of type in the vast periods of time that have elapsed since remains of life began to be fossilized in the rocks. To the first question no one has offered a solution more satisfactory than that proposed by our poet in these two lines. **829. debet**: see n. to 1, 232. **830. omnia** etc.: suggestive of the famous doctrine of Heraclitus, πάντα ῥεῖ. Yet in this ceaseless change it is the same old tale over again, there is nothing new. See 3, 945 and n. **832. aliut**: see n. to 1, 469. **833. contemptibus**: see n. to 3, 65. **836. potuit**: supply *ferre,* as also with *nequit* and *possit;* before *possit* supply *ut;* interpret in connection with 1, 264 and n.

Misshapen monsters, too, the earth bore in her prime; but these died off, unfitted to live or continue their kind (837–854), *and of well-formed animals brood on brood perished; for only the fittest to survive survived* (855–877).

837. **portenta** etc.: Empedocles was the first to teach that the earth produced all sorts of monstrosities; these perished because of their irregularity of structure caused by the chance grouping of members; cf. n. to 804. He, however, imagined beings of all kinds of impossible shapes, formed by the getting together of parts of different animals, or of parts of animals and of men. But Lucr. with his clearer conception of the unformity of nature and the reign of law seems to have thought that the majority of living things created were regularly formed. He has in mind here only abnormal variations from regular types; cf. his reasoning 878 *et seq.* That such should appear in great numbers is perfectly consistent with the rest of his theory. 839. **interutrasque**: see n. to 472; it refers, as *utrum* and *utrimque*, to man and woman. 840. **manuum**: after *viduata*, a rare constr. Cf. 2, 843 *secreta teporis* and n. to 1, 194. For the thought, cf. Cudworth 'Intellectual System,' ii. 595–8. 842. **adhaesu**: see n. to 3, 381. 849. **debere**: the verse has one syllable too many, the only case of the kind in Lucr., though examples are common enough in the other poets. 853. **habere** etc.: (*utrumque*) *habere* (*partes*) *qui* (= *quibus*) etc. For *qui* cf. n. to 1, 168. 854. **mutent**: Bernays, for *metuent.* 855. **animantum**: i.e., the animals of perfect organization. 857. **vesci** etc.: imitated by Verg. Aen. 3, 339 *vescitur aura* and elsewhere. 862. **acre** etc.: cf. 3, 741–2. 864. **levisomna**: this expressive compound is found only here. 867. **Memmi**: see n. to 1, 26. 871. **quis** = *quibus.* 876. **indupedita**: see n. to 1, 82. 877. **ad interitum** etc.: thus closes a spirited and remarkable statement in outline of the doctrine known to modern scientists as "the struggle for existence" and "the survival of the fittest." Consult Darwin, 'Origin of Species'; Huxley, 'Origin of Species,' ch. 6; Haeckel, 'Nat. Hist. of Creation,' ch. 7; Zeller, 'Prae-Soc. Phil.' ii. 160; Lange, 'Hist. of Materialism,' iii. 34 *et seq.*; Elam, 'Winds of Doctrine,' p. 122 *et seq.*

But not even then were there Centaurs, Scyllas, and the like; for such unions of dissimilar natures could never be. Many wonderful things the new earth produced, but none like these. 878–924.

878. **fuerunt**: see n. to 1, 406. 879. **bino**: the singular of *bini* is very rare. 880. **alienigenis**: 'heterogeneous'; cf. 1, 865 and n. 881. **potissit**: for *potis sit*, = *possit*: *potisit* is also found.

Cf. 1, 665 *potesse* and n.; see Neue, 'Formenlehre,' ii. 601–2. **882. corde**: 'understanding.' See n. to 3, 140 *pectore*. **884. ecus**: see n. to 1, 477. There follows a comparison between the ages of activity, maturity, and decline in the case of a horse and a man, showing that the two could by no means exist together in one form, as in the Centaur of fable. **886. senecta**: see n. to 3, 772. **888. illi**: weakened demonstrative, 'the.' **893. Scyllas**: the pl. is of course rare, as there was but one monster Scylla. **895.** Cf. 820. **897. unis**: see n. to 3, 616. **901** *et seq.* Flame burns animals; then how could such a being as the fire-breathing Chimaera exist? **903. visceris**: see n. to 1, 837. **905–6.** Edd. remark the trans. of Hom. Il. Z, 181–2: —

πρόσθε λέων, ὄπιθεν δὲ δράκων, μέσση δὲ χίμαιρα
δεινὸν ἀποπνείουσα πυρὸς μένος αἰθομένοιο.

Cf. Hes. Theog. 323. The myth of the Chimaera was in later times explained as originating in a volcano of that name in Lycia. **905. ipsa**: supply *Chimaera*, i.e., χίμαιρα in the primary sense of 'she-goat.' The *Chimaera* at the end of the line refers to the monster as a whole. **909. nov. nom.**: i.e., 'newness,' being but a name, not a power in itself. **912. suësse**: see nn. to 1, 60 and 216. **913. impete**: see n. to 505. **914–5.** cf. 1, 199–201 and nn. **922. complexa**: passive, as in the frag. of Cic., *invidiosa fortuna complecti.* **923–4.** Perhaps Lucr. would apply this principle to the non-variability of types. He nowhere seems to recognize the possibility of improvement or change of species by "natural selection"; the animals remain as they were at the first, except that the weaker and more useless kinds have been crushed out. Herein he stands in marked contrast with modern evolutionists.

iv. The Development of Man in Civilization.

1. The Condition of Primitive Man. 925–1010.

At first the race of men was like the brutes. Hardy and strong of limb, they lived on the offerings of the untilled earth, berries and acorns, quenched their thirst in the rippling brooks. Fire they knew not, nor social life nor marriage. And yet they did not dread the coming of the night, used to the darkness from their earliest days; rather they feared

the wild beasts that in the night oft drove them trembling from their leaf-strewn beds. 925–987.

925 *et seq.* Having explained the beginnings of life on the new earth the poet proceeds at once to trace the course of the human race. In showing how it developed, in a natural way and from purely natural causes, from brute-like savagery to civilization, he tacitly overthrows the popular notions of his time about the reign of Saturn on earth, and about the aid of the gods in bestowing on mankind inventions and the means of progress; as Prometheus was fabled to have brought down fire from heaven, Ceres to have taught the raising of grain, Bacchus the making of wine. By thus ignoring the gods he effectually does away with their power and influence as factors in the growth of institutions as well as in the amelioration of the conditions of the individual life. At the same time he traces with care the growth of superstitions, unfolding minutely the causes, and revealing the results in the blind bondage of man under groundless fears. The latter part of book 5 contains some of the finest passages of the poem. In connection with it read Herbert Spencer, 'Principles of Sociology,' Part I. Consult Morgan, 'Ancient Society,' Pt. 1; Darwin, 'Descent of Man,' Part I.; Mitchell, 'The Past in the Present,' Pt. 2; Sir J. Lubbock, 'Origin of Civilization'; Royer, 'Origine de l'homme.' **926. durius**: 'more hardy,' i.e., than to-day; *quod* is a relative. Ovid finds the cause of our hardiness in our origin, the stones cast by Deucalion and Pyrrha (Met. 1, 414–5):

> Inde genus durum sumus experiensque laborum,
> et documenta damus qua simus origine nati.

Cf. also Verg. Georg. 1, 63 *unde* (i.e. *ex lapidibus*) *homines nati, durum genus.* For a scientific discussion of the relative endurance and power of man in the primitive and man in the present condition see Spencer *ut sup.* ch. 5. **929–930.** An allusion to the fact early noticed that man is the only animal adapted to life in the extremes of either heat or cold, and on all kinds of food. **933** *et seq.* Similar expressions were often employed in describing the Golden Age; cf. n. to 820 and ref. Vergil and Ovid are both indebted to this passage. **934. scibat**: the shortened form *scibant* also is found 949, 953, 959. **941. arbita**: *arbuta* is the common spelling. Munro says that "at the present day, in December, you may see large tracts of the Pelopon-

nese covered with the arbute trees laden with their bright scarlet fruit." They are no longer so common in Italy as in Horace's time.— **puniceo**: 'scarlet.' **944. dura**: 'rough,' 'coarse.' **947. claru' citat**: Forbiger, for *claricitat* of MSS.; Lachmann has *clarigitat*, a form, found nowhere else, which he derives from *clarigo*. The adj. refers to the sound, as 1, 97. **952. scatere**: see n. to 40. **953** *et seq.* Cf. Aes. Prom. Vinct. 448 *et seq.* **957.** For the alliteration cf. 993. **958-9.** The more savage the state of man the more isolative, is a fundamental doctrine of the social compact theory, a crude form of which Lucr. held. Cf. 1145 *et seq.* **961. sibi valere**: i.e., to be his own master. **963. quamque**: *feminam.* **969.** Notice the chiasmus; see n. to 1, 21–2. **970. subu'**: the full form *suibus* is less common than the syncopated. See the examples collected by Neue 'Formenlehre,' 1, 288. **973. nec plangore** etc.: i.e., as they might have been expected to do; the implication is that when there was no religion or superstition men were not troubled with groundless fears, but only with real dangers, such as the coming of wild beasts. Interpret in connection with the oft-recurring simile, *Nam veluti pueri trepidant atque omnia caecis In tenebris metuunt, sic nos in luce timemus* etc., 2, 55–7 et al. **977. a parvis**: i.e., from childhood, a common expression. **979. erat ut** etc.: cf. 3, 715 and n. In 979–981 the poet appeals as often to the uniformity of nature. **980. diffidere ne** etc.: perhaps nowhere else *diffidere* is followed by a *ne*-clause. **986. intempestiva nocte**: 'in the dead of night.'

Yet in that early time the death-rate was not greater than now. Men were killed by wild beasts, indeed, but whole armies were uot swept off in one day, and the sea had as yet no spoil. Then want slew, but now luxury; and poison does its work not as of yore by accident, but by design. 988–1010.

988. mort. saecla: as in 805, where see note. **993.** This line is sometimes quoted as showing the force of alliteration, and as a marked illustration of the adaptation of sound to sense. There is something dismal and weird in the very succession of sounds.— **busto**: 'tomb,' 'grave.' See n. to 3, 906. **997. donique**: see n. to 708. **1002. hic**: 'at this time,' i.e. 'then.'—**temere**: 'aimlessly,' while *incassum* is 'uselessly' and *frustra* 'vainly.' Lucr. is

fond of emphasizing an idea by the use of several synonymous terms. Cf. 1430; 2, 1060. **1004.** Notice the alliteration. There is a fine adaptation of sound to sense in these lines referring to the sea. **1005. ridentibus undis**: cf. 1, 8; 2, 32; 2, 559; 5, 1395; the poet is fond of the metaphorical use of *ridere*. Cf. Catullus 64, 271 (*undarum*) *leni resonant plangore cachinni*; Aes. Prom. Vinct. 89 **ποντίων τε κυμάτων ἀνήριθμον γέλασμα.** Munro thinks there is no reference here to the "ringing ripple" or plash of the water, but only to the bright, smiling aspect of the surface. **1006. improba** etc.: the tendencies of ancient life were local, not national or cosmopolitan. The sea was looked upon as a natural barrier, that ought not to be crossed. Cf. Hor. Od. 1, 3, 21–6; Ov. Met. 1, 94–6. Navigation and commerce were held in low esteem. In their descriptions of the Golden Age the poets never fail to mention that there were no ships. Even Cicero thought commerce dishonorable unless its earnings were invested in estates; and then, as soon as possible, one must withdraw from it. See De Off. 1, 42, 151. **1008. nunc** etc.: in Lucretius' time the influence of eastern luxury was already being felt at Rome; earnest and patriotic citizens viewed the spread of it with disfavor and apprehension. In these few lines the keen satiric power of the poet is well shown. **1010. nurui** etc.: see n. to 3, 73; cf. Juv. Sat. 14, 220 *elatam iam crede nurum, si limina vestra Mortifera cum dote subit*, thus explained by Mayor: "Your son's wife, if she bring a portion, that makes it worth his while to take her life, is as good as dead and buried from the instant she crosses the threshold." Cf. Ov. Met. 1, 147–8.

2. The Beginnings of Civilization. 1011–1027.

Then men built huts, made clothing of skins, learned the use of fire and the relation of marriage. Hence manners began to soften; the harsh temper of parents was mellowed by the coaxing of children; neighbors agreed not to harm one another, to have regard for the women and the weak, a pact observed by most, not all. 1011–1027.

1011. ignem: the Epicureans thought that the "first and most important step in a social direction was the discovery of fire." Cf. Darwin, 'Descent of Man,' i. 132: "He (primitive man) has discovered the art of making fire, by which hard and strong roots can be made

digestible, and poisonous roots or herbs innocuous. This last discovery, probably the greatest, excepting language, made by man, dates from before the dawn of history." On the significance of the use of fire see Lange, 'Hist. of Materialism,' iii. 96. **1012.** The break in construction is probably caused by the dropping out of a verse, which Munro thus supplies:

hospitium, ac lecti socialia iura duobus.

Lachmann reads *conubium*, Bernays *coniugium*, for *cognita sunt*, without further change. Lucr. knows of no intermediate polygamy and polyandry preceding monogamy. See Morgan, 'Ancient Society'; Darwin, 'Descent of Man,' ii. 345. Notwithstanding the beneficial effects ascribed to marriage here, the Epicureans professed not to believe in it; cf. Diog. Laert. 10, 118–9 'Marriage, they say, is never any good to a man; one ought to be content if it does no harm; moreover the wise man will never marry or beget children, as Epicurus declares in his "Doubts" and in his "On Nature."' **1015. curavit**: 'brought it about.' **1019–1023.** See n. to 1145.

3. The Origin of Language. 1028–1090.

Speech arose from the impulse of nature and from use, just as children who cannot speak turn to making gestures. Each living thing is impelled to use the power it has; calves, cubs, and the young of birds use their means of defence long ere these are fully grown. To think one man invented speech is stupid; how should one find it out earlier than others, or make others learn from him? Nay, what wonder that men marked different feelings with different sounds of the voice? Even dogs and horses, gulls and crows, can thus express varying moods and passions. 1028–1090.

1028 *et seq.* To language as marking a step in the progress of the race Lucr. attaches great importance. With the view here presented cf. Epicurus Diog. Laert. 10, 75 'Words in the beginning did not originate by express agreement; but the very natures of men in the case of each people experiencing peculiar feelings and having peculiar ideas expelled the air accordingly, thus expressing different feelings and ideas differently, just as the people differed in location and sur-

roundings. . . . Later, in each nation particular terms were invented and put into usage by authority, that relations might be less ambiguous and speech more concise. The wise, too, bringing into experience things not apprehended by the senses made sounds to express them; and these terms came into use partly of necessity in the case of men desiring to express the same ideas, partly through those who following reason employed them in the same sense.' Most writers on the origin of Language agree with Lucr. in putting it after the first steps of progress. Cf. Haeckel, 'Nat. Hist. of Creation,' ii. 300: "The origin of articulate language must be looked upon as only a later, and the most important, stage in the process of the development of Man." The question whether language was in its origin natural or conventional was much discussed in antiquity; cf. Aul. Gel. 10, 4. Most of the philosophers held the view of Lucr., which is essentially that most widely adopted to-day, having as its champions Darwin ('Descent of Man,' i. 52–60), as well as many philologists. **1029. expressit nomina**: Epicurus says τὸν ἀέρα ἐκπέμπειν. **1031. infantia**: 'speechlessness,' 'inability to speak'; cf. 223 *infans*. **1033. vim**: for the acc. see n. to 3, 956. — **abuti**: in a good sense, = *uti; quoad*, 'how far.' **1035. illis**: i.e., *frontibus*; the horns are not yet grown, but the natural impulse to use them is felt. **1039. alituum**: see n. to 801. **1040. auxiliatum**: found only here. **1042. inde**: 'from him.' **1046. quoque**: i.e., as well as himself. **1047. unde** etc.: the reasoning is like that in 181 *et seq.*, where see nn. **1053. quid facto**: an expression rare outside of comedy. For the constr. see n. to 1, 1051. **1056–8.** The possession of a capacity impels to the use and development of it. Having the capacity to speak, man learned to speak. **1062. apertis**: cf. n. to 1, 915. **1063** *et seq.* Darwin in discussing the natural origin of language uses the same illustration for the same purpose as Lucr.; 'Descent of Man,' i. 52: "Although barking is a new art, no doubt the wild species, the parents of the dog, expressed their feelings by cries of various kinds. With the domesticated dog we have the bark of eagerness, as in the chase; that of anger; the yelping or howling bark of despair, as when shut up; that of joy, as when starting on a walk with his master; and the very distinct one of demand or supplication, as when wishing for a door or window to be opened." **1066. et**: 'than' **1071. baubantur**: found only here; the meaning is clear from the context. **1085. corvorum**: for the myths and beliefs

about the raven see 'Popular Science Monthly,' vol. 18, pp. 43-56: "A Flock of Mythological Crows." The ancients ascribed to it prophetic powers, whence it was reckoned sacred to Apollo.

4. The Discovery of Fire. 1091-1104.

Fire was discovered either by the lightning striking and igniting, or by the rubbing together of the boughs of trees till flame was produced; the use of it in preparing food men learned from the sun, which cooks and changes things by heat. 1091-1104.

1092 *et seq.* Lachmann has well shown that 1091-1160 are out of connection with what precedes and follows; that they are probably an addition by the poet after the rest of the poem was finished. He speaks here of the origin of fire, though its use was referred to in 1011; and there are other noticeable inconsistencies. **1095. fulgere**: *fulgĕre; fulgit* and other forms of the third conj. are occasionally met with in older writers. With 1095-1100 cf. 1, 897-906. The Stoics interpreted the myth of the hurling of Hephaestus from heaven (as related e.g. by Homer) to mean "that in ancient times men lighted their fires by lightning from heaven and the rays of the sun." Cf. Plin. N. H. 2, 2, 39.

5. The Beginning of Political Life. 1105-1160.

Day by day came changes for the better, urged on by those wiser and better than their fellows. Kings built cities; cattle and lands were divided up according to merit. But gold was discovered, which supplanted all other means of influence, and ambition led men on only to dash them from its dizzy heights. Then let men toil, if they will, along ambition's path, since they will not be wise. 1105-1135.

1106. **benigni**: has the force of an adv. **1107. corde**: synonymous with *ingenio;* 'understanding'; see n. to 3, 140. On the function of leadership in primitive society cf. Spencer, 'Prin. of Sociology,' ii. 311: In "an unorganized horde . . . the assembled individuals will fall, more or less clearly, into two divisions. The elder, the stronger, and those whose sagacity and courage have been proved by experience, will form the smaller part, who carry on the discussion; while the larger part, formed of the young, the weak, and the

undistinguished, will be listeners, who usually do no more than express from time to time assent or dissent." Spencer goes on to show how in each group usually there would be some one superior to all the rest, who would have "more than an individual share" of influence. Such would correspond perhaps to Lucretius' *reges*. **1110.** Notice that Lucr. conceives of property as at first held in common; and that the form he mentions first is stock. Did he assume a pastoral state intermediate between the agricultural and utter savagery? The Romans themselves recognized the derivation of *pecunia* from *pecus*; cf. Varro L. L. 5, 95 *pecus, a quo pecunia universa, quod in pecore pecunia tum consistebat pastoribus*. **1111. facie**: cf. 1114 *pulchris*; 1116 *pulchro corpore*; refers to the entire appearance of a man. Modern writers on the development of civilization attribute great importance to physical prowess and superior ability, but less to mere appearance than our poet. Darwin, however, discusses fully the bearing of beauty on the progress of the race through its influencing the selection of partners in marriage: see 'Descent of Man,' ii. 326–338. **1113. res**: 'wealth.' The ancient poets often inveighed against gold as the "root of all evil." Cf. Ov. Met. 1, 135 *et seq.*: —

> communemque prius, ceu lumina solis et auras,
> cautus humum longo signavit limite mensor.
> . . . itum est in viscera terrae;
> quasque recondiderat Stygiisque admoverat umbris,
> effodiuntur opes, inritamenta malorum;

also Verg. Aen. 3, 55 *quid non mortalia pectora cogis, Auri sacra fames*. **1117** *et seq.* Ethical reflections like these, interspersed throughout the poem, testify to the poet's earnestness of purpose. With 1117–9 cf. 2, 20–33; Epicurus, Diog. Laert. 10, 130 'And we think contentment a great good, not that we may altogether put up with a little, but that if we have not much we may use the little, being fully persuaded that those most enjoy abundance who would the least feel the lack of it; and that while everything that is natural is easy to get, whatever is useless is hard to procure,' etc.; cf. also Id. 10, 144 and 146. Contentment with a little was a favorite theme of Horace; the wise man, the Epicurean said, could live happily on bread and water. The luxurious tendencies of later Epicureans arose from emphasizing the doctrine of pleasure inculcated by their master above that of self-control and rational enjoyment. **1119. penuria parvi**: a little



is always to be had. **1120** *et seq.* In this vivid portrayal of the influence and dangers of ambition, we notice again the effect of his surroundings on the poet. See n. to 3, 59. **1124. iter viai**: pleonastic; cf. 2, 626. **1125. et tamen**: see n. to 1, 1050. **1127. summa**: 'the highest places.' **1128. quae . . . cumque**: tmesis. **1129–30.** The Epicureans did not approve of public life; for it is much more disturbed than private life, and thus defeats the chief end, — wisdom and happiness. Cf. the first of the κυρίαι δόξαι, quoted in n. to 168. **1129. satius**: 'better,' 'preferable.' **1133. alieno** etc.: i.e., following the common opinion that wealth and position bring happiness. **1134. sensibus**: Epicureanism forsooth is a 'common-sense' philosophy. Trans. *sensibus* 'feelings.'

The kings were overthrown, anarchy reigned supreme. Then men agreed for peace to have laws and magistrates; for violence hems in the wrong-doer, and apprehensive terrors wreck his happiness. 1136–1160.

1136 *et seq.* In the political changes here described Lucr. seems to have had in mind the course of the Greek states. **1138. summi**: 'highest,' i.e., sovereign; *insigne* refers, of course, to the crown; *cruentum*, 'stained with gore.' **1141.** 'And so the state was going back into the hands of the lowest and the disorderly' is the common interpretation; better that of Munro, 'And so in the end matters would come to the lees of uttermost disorder.' **1142. summatum**: found only here. **1143. partim**: see n. to 3, 78; 'some.' Supply *homines* as subject acc. to *creare.* **1145.** Here in a nutshell is the doctrine of the social contract, which in modern Europe has struggled for the mastery with the theory of the divine right of kings, and which played so important a part in the French Revolution; it even finds a partial expression in the proem to the American Declaration of Independence. With 1145–6 cf. Hobbes, 'Leviathan,' ch. 1, 12: "The natural state of men, before they entered into society, was a mere war, and that not simply, but of war of all men against all men;" Id. ch. 12: "In the nature of man we find three causes of quarrel: first, competition; secondly, diffidence; thirdly, glory." Consult also Id. ch. 13 "On the Primitive Condition of Mankind as concerning their Felicity and Misery;" Rousseau, 'Le Contrat Social'; Hallam, 'Literature of Europe,' see index; Guyau, 'Morale d'Épicure' etc., 4, 1, 2; Wines, 'Laws of the Ancient

Hebrews,' Introd. This doctrine of the social pact could be consistently held by Lucr., who thought that men were formed independently, did not arise in groups from a lower order. It is, of course, discarded by modern evolutionists, who trace the origin of government to "the inherited natures of its members, regulated by the ideas transmitted from the past. Guidance by custom is the sole conceivable guidance at the outset" (Spencer, 'Prin. of Sociology,' ii. 512). **1149. legibus aequis**: in thus founding civil society and justice on "a contract entered into for purposes of mutual security" Lucr. was closely following his master. Cf. Diog. Laert. 10, 150 'Justice is not something existing by itself, but has its origin in mutual contracts; it is found wherever there is a mutual agreement not to do hurt or suffer hurt to be done;' Id. 151 'In general, justice is the same for every one; for there would be some advantage in mutual society. But still in particular cases differences of place and other conditions make justice not the same for all.' 'Injustice is not in itself bad, but only seems so because there is involved with it a fear of not escaping those appointed to chastise those who do unjust things.' **1152. quemque**: i.e., every one that engages in violence and wrong-doing. Cf. Epicurus, Diog. Laert. 10, 151 'It is not possible for one who does anything contrary to the terms of the compact not to do hurt or suffer it to be done, to be confident that he will escape notice, even if already he shall have escaped notice ten thousand times; for until death it is not certain that he will not be found out.' **1153. unde**: = *a quo;* see n. to 1, 56. The thought suggests the homely proverb "crows always come home to roost.' 1156. The poet makes use of a common expression; of course in his belief no criminal had anything to fear from the gods. Cf. 3, 978–1023. 1159. **protraxe**: see n. to 1, 233. For the thought cf. 4, 1018–9.

6. The Origin of Religion. 1161–1240.

The ills of superstition arose partly from visions in which beings larger than life, radiant and ever-blessed, seemed to be present; and partly from the wondering awe with which men gazed upon the on-going of things in the heavens; not knowing the true causes of these, they assigned them to gods dwelling there. 1161–1193.

1161 *et seq.* The notions about the gods and the fear of them originated, according to Lucr., in visions, both waking (1170 *animo vigi-*

lante) and sleeping (1171 *in somnis*), and in the reflections of men before the mysteries of natural phenomena. It must be borne in mind that the Epicureans thought of the gods as really existing, blessed and immortal; it is only the groundless fear of them and the worship based thereon that Lucr. objects to. Cf. 82 *et seq.* and n. to 3, 17. With the view of Lucr. cf. Hobbes (ed. Molesworth, iii. 98): "In these four things, opinions of ghosts, ignorance of second causes, devotion towards what men fear, and taking of things casual for prognostics, consisteth the natural seed of religion"; also Id. 'Leviathan,' ch. 12; the 'Système de la Nature,' ii., Pt. 2; Darwin, 'Descent of Man,' i. 62–6; Hume, 'The Natural History of Religion'; Cudworth, 'Intellectual System of the Universe,' ch. 5; but especially Spencer's careful analysis of primitive religious ideas and their outcome, in his 'Prin. of Sociology,' Pt. 1, ch. 10–25, and Lubbock, 'Origin of Civilization,' ch. 4. **1162. ararum**: see n. to 5, 39. **1173.** Cf. 4, 453–6; 4, 788–93; 4, 877 *et seq.* For a discussion from the Epicurean standpoint of the origin of our notion of the gods, with the distinction between what should and should not be accepted, see Cic. N. D. 1, 16, 43 *et seq.* **1177. et tamen**: see n. to 1, 1050. **1183** *et seq.* Cf. Epicurus, Diog. Laert. 10, 142–3 'If apprehensions regarding things in the heavens and death did not disturb us, provided we still had any courage to think about the limits of pains and desires, we should not have any need of studies in physical science.' 'It is of no use to secure safety, as far as men are concerned, if one has apprehensions about the things above and those under the earth, and in brief those in the infinite.'

O miserable race of men, that by attributing such deeds and passions to the gods hath brought us woes! 'Tis not true piety to observe religious rites, but to live with soul untroubled. Many a heart is vexed with wondering whether the world is mortal; men tremble in the presence of lightnings, storm, and earthquake. What wonder, since some unseen power seems to make sport of human efforts? 1194–1240.

1194 *et seq.* Cf. Hobbes, 'Hum. Nat.' ch. 3: "If this superstitious fear of spirits were taken away, and with it prognostics from dreams, false prophecies, and many other things depending thereon, by which crafty and ambitious people abuse the simple people, men would be much more fitted than they are for civil government." Cf. n. to 1, 62.

1198. **velatum**: the Romans prayed with the head covered, the Greeks with it uncovered. 1199. **vertier**: in the use of this term Munro finds a reference to "another habit of Roman worship; the suppliant approached in such a way as to have the statue of the god on his right, and then after praying wheeled to the right so as to front it, and then prostrated himself." — **lapidem**: may refer to a statue made of stone, or to the rough blocks of stone like the *termini*, at which the passer-by paused to offer worship. 1203. **mage**: rarer form of *magis*, found also 4, 81 and 756. The Epicureans maintained that the gods should be worshipped, but only on account of their exalted and immortal nature. Cf. Cic. N. D. 1, 17, 45 *nam et praestans deorum natura hominum pietate coleretur, cum et aeterna esset et beatissima — habet enim venerationem iustam quicquid excellit — et metus omnis a vi atque ira deorum pulsus esset* etc. 1206. **viarum**: the expression *venire in mentem* is considered as equivalent to a verb of remembering, and is hence used with the gen.; 'we think of the courses' etc. Cf. Cic. Fin. 5, 1, 2 *venit mihi Platonis in mentem*. H. 406, III. n. 1209. see n. to 1, 75-7. 1214. **solliciti**: Bentley, for *et taciti*, adopted also by Lachmann and Bernays. See n. to 1, 343. 1216. Cf. 1, 1004. 1218-21. So with Horace; cf. n. to 83. 1225. **poenarum**: attracted from its natural constr. in the acc. to the case of *solvendi*. 1227. **induperatorem**: = *imperatorem*. See n. to 1, 82. 1230. Marked off by Lachmann as spurious or out of place, *nam ventorum paces ineptissime subiciuntur divom paci, qua significatur pacata deorum sedes.* — **paces**: the pl. is rare. — **animas**: cf. n. to 1, 715. 1233. **vis abdita quaedam**: what Lucr. meant by this it is difficult to say; probably he was thinking of the unseen way in which the laws of nature, themselves unchangeable, operate. 1234. **fascis** etc.: the concrete for the abstract, implying the attainment of the highest power and the greatest glory that man could gain. 1239. **potestatis**: pl. — **relinqunt**: sometimes found for *relincunt*. See n. to 3, 553.

7. The Discovery of the Metals. 1241-1280.

The metals were found out through the burning of forests, by which the veins of ore were melted and flowed to the surface. At first copper was preferred, and gold slighted from its uselessness; but now gold is rated most highly. Thus changes come with time. 1241-1280.

1241. aes: 'copper'; the word more commonly denotes an alloy of copper and tin, a kind of bronze. **1246. ergo**: see n. to 3, 78. **1248. pascua** etc.: i.e., to make the woodlands pasture-lands by burning off the timber. Notice the alliteration of the line. **1253** *et seq.* Munro quotes Milton's imitation of these lines, 'Par. Lost,' 11, 564–9: —

> "who, at the forge
> Labouring, two massy clods of iron and brass
> Had melted, (whether found where casual fire
> Had wasted woods on mountain or in vale,
> Down to the veins of earth; thence gliding hot
> To some cave's mouth; or whether washed by stream
> From underground;)" etc.

1261. atque: after *simili;* the masses of cooling metal ran into shapes according to the forms of the cavities in which they collected. **1268. terebrare**: 'drill;' *pertundere,* 'pierce;' *perforare,* 'bore.' **1273-4.** Certain tribes of American Indians when first discovered are said to have valued iron more highly than gold. Tacitus (Germ. 5) relates the same thing of the early Germans. Cf. n. to 1113. **1276** *et seq.* Cf. 830–6 and nn.

8. The Methods of early Warfare. 1281–1349.

The uses of iron were discovered by men trying to find the best arms for war. At first for all purposes copper was employed, because more common and easier to work. In battle, too, they learned to make use of chariots and elephants. 1281–1307.

1284. silv. fragmina: i.e., 'broken from trees.' **1289. aere** etc.: edd. notice the resemblance to Hesiod, 'Works and Days,' 150–1: —

> *τοῖς δ' ἦν χάλκεα μὲν τεύχεα, χάλκεοι δέ τε οἶκοι,*
> *χαλκῷ δ' εἰργάζοντο· μέλας δ' οὐκ ἔσκε σίδηρος.*

1291. ollis: see n. to 1, 672. **1294. versa** etc.: this may refer, as Bentley and Munro observe, to the use of the brazen sickle "in magical and unlawful rites;" cf. Verg. Aen. 4, 513 *falcibus et messae ad lunam quaeruntur aënis Pubentes herbae;* Ov. Met. 7, 227 *partim succidit curvamine falcis aënae.* "But Lucr. may merely mean 'went

out of fashion,' 'fell into disgrace.'" **1296. exaequata**: i.e., by the use of the same kind of weapons on both sides. **1300. bis binos**: *quadriiugos*. **1301. falciferos currus**: used by the Asiatic nations, from the earliest times. **1302. boves lucas**: 'elephants'; called 'Lucanian cattle' because the first elephants the Romans ever saw were in Lucania, in the army of Pyrrhus. See Plin. N. H. 8, § 16; Var. L. L. 7, § 39. **1303 anguimanus**: found also 2, 537, and of course applied only to the elephant. Edd. quote Cic. N. D. 2, 47, 122 *manus etiam data elephanto est, quia propter magnitudinem corporis difficilis aditus habebat ad pastum*. **1305. alid**: see n. to 1, 263.

Bulls, too, and boars and lions were used in war, but only for a time; for, frenzied, they destroyed friend and foe alike in ruthless slaughter. It is likely they were tried only by the defeated in last resort. 1308–1349.

1310. partim: see n. to 3, 78. **1312. his**: *moderari* is more commonly construed with the acc. **1315.** Cf. 2, 632. **1320. nec**: see n. to 3, 959. **1321. deplexae**: found only here; 'fastening themselves upon them.' **1324. hauribant**: = *hauriebant*; cf. 934 *scibat* and n. — **supter**: see nn. to 1, 79 and 66 *contra*. **1325. ruebant**: see n. to 1, 272. **1328. fracta** etc.: notice the powerful effect of the repetitions. **1330–1.** 'For the tame beasts would try to avoid by shying to one side the cruel push of the tusk, or would rear up and paw the winds.' **1332. ab**: refers, as often, to the place or part concerned. **1335. in rebus agundis**: 'in the heat of action.' For the form of the gerundive see n. to 1, 59. **1337. redducere**: see n. to 1, 228. **1339. mactae**: according to Munro, from *macĕre*, 'to beat,' 'strike,' 'hack about.' **1340–1346.** The last three of these vss. are rejected by Lachmann, and the whole six by Munro. "as the work of an interpolator." Lach. reads *sic* for *si* in 1341, with a period after *facerent*, and transposes 1342–3. **1345** is the same as 528.

9. The Invention of Weaving. 1350–1360.

The art of weaving was found out after the discovery of iron, from which the machinery of it is made. At first men wove, then women. 1350–1360.

1350. **Nexilis vestis**: a skin or piece of bark tied on to the body. 1353. **insilia** etc.: parts of the loom; *insilia* (not found elsewhere), 'heddles,' often mistranslated 'treadles'; *fusi*, 'spindles'; *radii*, 'shuttles'; *scapi*, 'yarn-beams.' See Smith's 'Dict. of Antiq.' p. 1099, and Munro's n. 1354. Herodotus says that, although the Egyptian weaving was done by the men (2, 35 *ἐν τοῖσι αἱ μὲν γυναῖκες ἀγοράζουσι καὶ καπηλεύουσι· οἱ δὲ ἄνδρες, κατ' οἴκους ἐόντες ὑφαίνουσι*), as early as the age of Homer the Greek women wove. 1355-6. **nam** etc.: "In our own day, when the industry of women, step by step, — sometimes even with a leap, — is forcing its way into vocations devised and hitherto exclusively pursued by men, this thought is much more pertinent than in the times of Epicurus and Lucretius, when such transferences of whole professions, so far as we know, did not occur." Lange, 'Hist. of Materialism,' i. 153-4. In his estimate of the inferiority of woman's ability Lucr. reflects the general opinion of antiquity. 1357. **vitio** etc.: the hard-working husbandmen so cried shame upon the male weavers that these gladly gave the art over into the hands of the women, and engaged in more laborious toil.

10. The Beginnings of Agriculture. 1361-1378.

Planting and grafting nature herself taught; after that men discovered one branch of husbandry after another. 1361-1378.

1364. **pullorum**: 'shoots.' 1368. **terram**: obj. of the gerunds. 1374. **caerula**: the 'light-green,' 'greyish-green' olive orchards are a marked feature of the Italian landscape. — **inter plaga cur.**: tmesis. 1378. **arbustis**: here in its ordinary sense, 'orchards'; cf. n. to 1, 187.

11. The Invention of Music. 1379-1435.

Song men learned from birds; the breeze blowing through reeds gave them the first notion of the pipe, which they improved upon with time. With its simple music they were pleased at mirth-makings, solaced in times of watching, pleased as much as we to-day with finer strains. For men like what they have if they have known nothing better; and now

people have wearied of that simple early life, and, ignorant of true pleasure, must needs revel in luxury, vexed with idle cares. 1379–1435.

1381. **concelebrare**: cf. n. to 1, 4. 1382. **zephyri**: gen. 1385. = 4, 585. 1386. **reperta**: with *tibia*. 1387. **otia dia**: i.e., an absolute and unruffled calm, like the peace of the gods. The places in the poet's mind are probably the higher mountain lands, with their infrequent flocks and shepherds. 1388–9 are the same as 1454–5, and here interrupt the thought, hence are omitted. 1391. **tum** etc.: when man's physical needs are satisfied he takes delight in higher things. — **cordi**: 'agreeable.' Roby gives a full list of like datives, 'Gr.' ii. pref. xxv–lvi. 1392–6. Cf. 2, 29–33. 1399–1400. Cf. 3, 912–3 and n. 1402. **duriter**: 'awkwardly.' Notice the fine adaptation of sound to sense. 1407. **supera**: see n. to 1, 429. Cf. 4, 588. 1408. **vigiles**: public watchmen. 1409. **recens**: adv., as in 2, 416. 1414. "Wakefield gives us the choice of two constructions; *illa melior res posterior reperta perdit sensus*, which he prefers; and *posterior res melior perdit illa reperta;* but there is a third course open to us, *posterior res melior reperta perdit illa* (*priora*); and that I doubt not is what Lucr. meant; he is sufficiently indifferent to such ambiguities." Thus says Munro, and his interpretation is the most satisfactory, as it explains *pristina;* at best the sentence is puzzling. 1415. **sensus ad**: 'the feelings in regard to.' 1417. Cf. 987. 1419–20. So great a novelty was the first garment of skins, and so great jealousy it excited that the man who wore it perished at the hands of his fellows. 1421. **et tamen**: 'and (though they had disposed of the wearer) yet' etc.; see n. to 1, 1050. 1423. see n. to 1113. 1428. **signis**: figures woven in the cloth, often with gold thread and of fine execution. 1430. **frustra**: see n. to 1002. 1432–3. See nn. to 3, 15 and 1, 112. 1434. See n. to 1006.

12. Progress in Knowledge and the Arts. 1436–1457.

The changes of seasons and the fixed law of their succession men learned from the courses of the sun and moon. 1436–1439.

1436. **mundi**: as in 443 where see n. — **templum**: see n. to 1, 120. 1437. **lustrantes** etc.: Munro compares Cic. Arat. 237 *quattuor aeterno lustrantes lumine mundum Orbes stelligeri* etc.

Then came fortified cities, division of lands, navigation, treaties between states, letters, and poetry. 1440–1447.

1441. See n. to 1110. 1442. **puppibus**: see n. to 1, 255. 1445. **elementa** : i.e , *litterae,* the alphabet; cf. Suet. Caes. 56 *quartam elementorum litteram*. **1446–7.** Cf. 326 *et seq.*

Thus the arts, useful and ornamental alike, have followed one after the other in gradual progress, until we have now reached the highest point. 1448–1457.

1451. **daedala signa**: 'skilfully wrought statues.' **1456–7** Cf. 1, 1115–7.

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